EXHIBIT 11

Smith Economics Group, Ltd.

A Division of Corporate Financial Group

Economics / Finance / Litigation Support

Stan V. Smith, Ph.D. President

November 12, 2014

Ms. Carol L. Hepburn Hepburn Law Office 2722 East Lake Avenue East, Suite 200 Seattle, WA 98102

Re: "Sarah"

Dear Ms. Hepburn:

You have asked me to calculate the value of certain losses suffered by the young woman who has been identified in the so-called "Sarah" series of child pornography images, subsequent to her portrayal in those images. These losses are: (1) the loss of wages and employee benefits; (2) the present value of future care; and (3) the reduction in value of life ("RVL"), also known as loss of enjoyment of life.

"Sarah" is a Caucasian female, who discovered that she was a victim of child pornography on November 6, 2007 at the age of 13.9 years. "Sarah" will be 21.0 years old at the estimated trial or resolution date of January 1, 2015, with a remaining life expectancy estimated at 60.9 years. This data is from the National Center for Health Statistics, <u>United States Life Tables</u>, 2009, Vol. 62, No. 7, National Vital Statistics Reports, 2014.

In order to perform this evaluation, I have reviewed the following materials: (1) the forensic psychological report by Dr. Randall Green dated July 7, 2014; (2) the vocational assessment by Ms. Merrill Cohen dated September 10, 2014; (3) an interview with "Sarah" on November 10, 2014; and (4) the case information form.

My methodology for estimating the losses, which is explained below, is generally based on past wage growth, interest rates, and consumer prices, as well as studies regarding the value of life. The effective net discount rate using statistically average wage growth rates and statistically average discount rates is 0.25 percent.

My estimate of the real wage growth rate is 1.00 percent per year. This growth rate is based on Business Sector, Hourly Compensation growth data from the Major Sector Productivity and Costs Index found at the U.S. Bureau of Labor Statistics website at www.bls.gov/data/home.htm, Series ID: PRS84006103, for the real increase in wages primarily for the last 20 years.

My estimate of the real discount rate is 1.25 percent per year. This discount rate is based on the rate of return on 91-day U.S. Treasury Bills published in the Economic Report of the President Table for "Bond yields and interest rates" for the real return on U.S. Treasury Bills primarily for the last 20 years. This rate is also consistent with historical rates published by Ibbotson Associates, Chicago, in its continuously updated series Stocks, Bonds, Bills and Inflation published by Morningstar, Inc. This series, which acknowledges me as the Originator while a Principal and Managing Director at Ibbotson Associates, is generally regarded by academics in the field of finance as the most widely accepted source of statistics on the rates of return on investment securities. It is relied upon almost exclusively by academic and business economists, insurance companies, banks, institutional investors, CPA's, actuaries, benefit analysts, and economists in courts of law.

Estimates of real growth and discount rates are net of inflation based on the Consumer Price Index (CPI-U), published in monthly issues of the U.S. Bureau of Labor Statistics, CPI Detailed Report (Washington, D.C.: U.S. Government Printing Office) and available at the U.S. Bureau of Labor Statistics website at www.bls.gov/data/home.htm, Series ID: CUURO000SAO. The rate of inflation for the past 20 years has been 2.37 percent.

<u>I(A). LOSS OF WAGES AND EMPLOYEE BENEFITS - Annual Employment</u>

Tables 1 through 7, 8 through 14, and 15 through 17 show the loss of wages and benefits in three scenarios. "Sarah" states that her plan was to have her own daycare center. She states that her plan was to graduate high school and get a degree in early childhood education. She states that her plan was to have a daycare focusing on providing care to children of low income single mothers.

Ms. Merrill Cohen outlines the educational history of "Sarah"'s family in her report dated September 10, 2014. "Sarah"'s mother is a registered nurse and has a college education. Her stepfather had a career in the Army and then went to college. "Sarah" reports that all of her father's family completed high school and many went to college. Ms. Cohen states that if "Sarah" had not experienced the severe trauma, she would have at a minimum completed high school, and potentially even an . Associate degree.

Scenario 1 assumes that if not the severe trauma, "Sarah" would have graduated high school and then entered the workforce. The Scenario 1 wage estimate starting July 2012 is illustrated at the average earnings of non-Hispanic, white females between the ages of 18 and 24 years old with a high school degree of \$22,389 in year 2013 dollars. The wage estimate is grown in the year 2029

to the average earnings of non-Hispanic, white females between the ages of 35 and 44 years old with a high school degree of \$34,314 in year 2013 dollars. This wage data is published in the U.S. Census Bureau, <u>Current Population Survey</u>, 2013 <u>Annual Social and Economic Supplement</u>, Washington, D.C., 2014.

Scenario 2 assumes that if not the severe trauma, "Sarah" would have completed an Associate degree and then entered the workforce. The Scenario 2 wage estimate starting July 2014 is illustrated at the average earnings of non-Hispanic, white females between the ages of 18 and 24 years old with an Associate degree of \$29,066 in year 2013 dollars. The wage estimate is grown in the year 2029 to the average earnings of non-Hispanic, white females between the ages of 35 and 44 years old with an Associate degree of \$41,452 in year 2013 dollars.

Scenario 3 assumes that if not the severe trauma, "Sarah" would have completed a Bachelor's degree and then entered the workforce. The Scenario 2 wage estimate starting July 2016 is illustrated at the average earnings of non-Hispanic, white females between the ages of 18 and 24 years old with a Bachelor's degree of \$34,688 in year 2013 dollars. The wage estimate is grown in the year 2029 to the average earnings of non-Hispanic, white females between the ages of 35 and 44 years old with a Bachelor's degree of \$64,084 in year 2013 dollars.

Employee benefit estimates are based on data from the U.S. Department of Labor, Bureau of Labor Statistics, Employer Cost of Employee Compensation - December 2013, 2014, found at www.bls.gov/ect. I have assumed that employee benefits grow at the same rate as wages and are discounted to present value at the same discount rate. Since these tables assume annual work, I do not include employee benefits relating to unemployment, injury, illness or disability; benefits are estimated at 25.9 percent of wages.

I assume annual employment each year and show the accumulation through life expectancy. While these tables are calculated through the end of life expectancy, the losses from working through any age can be read off the table.

Based on the above assumptions, my opinion of the wage loss for Scenario 1 is \$2,523,488 \blacktriangleright Table 7; this figure assumes work to age 81.9, but the ability to work through any assumed age may be read from Table 7; for example, the loss to age 67 for Scenario 1 is \$1,932,148.

Based on the above assumptions, my opinion of the wage loss for Scenario 2 is $\$2,987,783 \rightarrow \text{Table 14}$; this figure assumes work to age \$1.9, but the ability to work through any assumed age may be read from Table 14; for example, the loss to age \$7 for Scenario 2 is \$2,273,436.

Based on the above assumptions, my opinion of the wage loss for Scenario 3 is \$4,384,153 \blacktriangleright Table 17; this figure assumes work to age 81.9, but the ability to work through any assumed age may be read from Table 17; for example, the loss to age 67 for Scenario 3 is \$3,279,861.

I(B). EARNINGS OFFSET

Dr. Green outlines "Sarah"'s educational history in connection with her victimization and learning of the distribution of her images. "Sarah" was in sixth grade when she disclosed her victimization, and ninth grade when her father was prosecuted and convicted. During this time, she underachieved academically and was overwhelmed. "Sarah"'s educational difficulties continued in high school and she did not graduate from high school. "Sarah" has not completed her GED, although she expresses interest in doing so.

"Sarah" indicates she worked briefly as a bikini barista but left that job because she was uncomfortable being around so many people. She states that she is uncomfortable being in public, she does not go anywhere by herself and does not have a driver's license. She states that she has been doing marketing and promoting at events for an on-line community but has not made any money yet. She states that she has to have other girls with her at these events, and she cancelled 3 events because she could not find anybody to go with her.

Ms. Cohen states that with her psychological and physical limitations, "Sarah" is currently incapable of working even in an unskilled, minimum wage position on a reasonably continuous basis. Ms. Cohen states that if "Sarah" engaged in treatment, it is impossible to tell the degree to which the treatment will be effective in improving her ability to function and work.

Since Ms. Cohen opines that "Sarah" is currently incapable of even minimum wage work, I assume "Sarah" has a 100 loss of earnings. If "Sarah" obtains treatment and as a result is able to enter the workforce, I will supplement my report.

II. COST OF FUTURE LIFE CARE

Table 18 shows the cost of future life care. The present value of life care is based on the recommendations in the forensic psychological report by Dr. Randall Green dated July 7, 2014 and the vocational assessment by Ms. Merrill Cohen dated September 10, 2014. As discussed in Dr. Green's report, psychiatric medication is not included. If "Sarah" begins such medication, I will supplement my analysis to include those costs.

I assume real growth rates of 1.75 percent for medical services, 0.40 percent for medical commodities, 1.00 percent for non-medical services, and zero percent for non-medical commodities. These growth rates are based on medical care growth data from 1993 through 2013 found at the U.S. Bureau of Labor Statistics website at www.bls.gov/data/home.htm, Series ID: CUUR0000SAM1 and CUUR0000SAM2.

Based on this information, my opinion of the average cost of future life care is \$448,552 ▶ Table 18, Page 15, and can vary up or down by as much as 28.5 percent or \$127,860.

III. REDUCTION IN VALUE OF LIFE

Economists have long agreed that life is valued at more than the lost earnings capacity. My estimate of the value of life is based on many economic studies on what we, as a contemporary society, actually pay to preserve the ability to lead a normal life. The studies examine incremental pay for risky occupations as well as a multitude of data regarding expenditure for life savings by individuals, industry, and state and federal agencies.

My estimate of the value of life is consistent with estimates published in other studies that examine and review the broad spectrum of economic literature on the value of life. Among these is "The Plausible Range for the Value of Life," Journal of Forensic Economics, Vol. 3, No. 3, Fall 1990, pp. 17-39, by T. R. Miller. This study reviews 67 different estimates of the value of life públished by economists in peer-reviewed academic journals. The Miller results, in most instances, show the value of life to range from approximately \$1.6 million to \$2.9 million dollars in year 1988 after-tax dollars, with a mean of approximately \$2.2 million dollars. In "The Value of Life: Estimates with Risks by Occupation and Industry, " Economic <u>Inquiry</u>, Vol. 42, No. 1, May 2003, pp. 29-48, Professor W. K. Viscusi estimates the value of life to be approximately \$4.7 million dollars in year 2000 dollars. An early seminal paper on the value of life was written by Richard Thaler and Sherwin Rosen, "The Value of Saving a Life: Evidence from the Labor Market." in N.E. Terlickyj (ed.), Household Production and Consumption. New York: Columbia University Press, 1975, pp. 265-300. The Meta-Analyses Appendix to this report reviews additional literature suggesting a value of life of approximately \$5.4 million in year 2008 dollars.

Because it is generally accepted by economists, the economic methodology for the valuation of life has been found to meet the <u>Daubert</u> and <u>Frye</u> standards by many courts, along with the Rules of Evidence in many states nationwide. My testimony on the value of life has been accepted in approximately 200 state and federal cases nationwide in approximately two-thirds of the states and

two-thirds of the federal jurisdictions. Testimony has been accepted by U.S. district and appellate courts as well as in state circuit, appellate, and supreme courts. Proof of general acceptance and other standards is found in a discussion of the extensive references to the scientific economic peer-reviewed literature on the value of life listed in the Value of Life Appendix to this report.

The underlying, academic, peer-reviewed studies fall into two general groups: (1) consumer behavior and purchases of safety devices; (2) wage risk premiums to workers; in addition, there is a third group of studies consisting of cost-benefit analyses of regulations. For example, one consumer safety study analyzes the costs of smoke detectors and the lifesaving reduction associated with them. One wage premium study examines the differential rates of pay for dangerous occupations with a risk of death on the job. Just as workers receive shift premiums for undesirable work hours, workers also receive a higher rate of pay to accept a increased risk of death on the job. A study of government regulation examines the lifesaving resulting from the installation of smoke stack scrubbers at high-sulphur, coalburning power plants. As a hypothetical example of the methodology, assume that a safety device such as a carbon monoxide detector costs \$46 and results in lowering a person's risk of premature death by one chance in 100,000. The cost per life saved is obtained by dividing \$46 by the one in 100,000 probability, yielding \$4,600,000.

Tables 19 through 21 are based on several factors:

- (1) An assumed impairment rating benchmark, based on the interview, of a 50 percent reduction in the ability to lead a normal life. The diminished capacity to lead a normal life reflects the impact on career, social and leisure activities, the activities of daily living, and the internal emotional state, as discussed in Berla, Edward P., Michael L. Brookshire and Stan V. Smith, "Hedonic Damages and Personal Injury: A Conceptual Approach," Journal of Forensic Economics, Vol 3, No. 1, Winter 1990, pp. 1-8. It is standard forensic economic practice to conduct an informational interview in order to obtain the percentage loss assessment of the injured party; for example, it is recommended by Gerald Martin in his 2009 edition of Determining Economic Damages, James Publishing Group, Santa Ana, CA.;
 - (2) The central tendency of the range of the economic studies cited above which I estimate to be approximately \$4.5 million in year 2014 dollars; and
 - (3) A life expectancy of 81.9 years.

Based on these values and life expectancy, my opinion of the reduction in the value of life is estimated at \$3,313,843 > Table 21.

Other factors may be weighed to determine if these estimated losses for "Sarah" should be adjusted because of special qualities or circumstances that economists do not as yet have a methodology for analysis.

In each set of tables, the estimated losses are calculated from November 6, 2007 through an assumed trial or resolution date of January 1, 2015, and from that date thereafter. The last table in each set accumulates the past and future estimated losses. These estimates are provided as a tool, an aid, and a guide for evaluation by others.

All opinions expressed in this report are clearly labeled as such. They are rendered in accordance with generally accepted standards within the field of economics and are expressed to a reasonable degree of economic certainty. Estimates, assumptions, illustrations and the use of benchmarks, which are not opinions, but which can be viewed as hypothetical in nature, are also clearly disclosed and identified herein.

In my opinion, it is reasonable for experts in the field of economics and finance to rely on the materials and information I reviewed in this case for the formulation of my substantive opinions herein.

If additional information is provided to me, which could alter my opinions, I may incorporate any such information into an update, revision, addendum, or supplement of the opinions expressed in this report.

If you have any questions, please do not hesitate to call me.

Sincerely,

Stan V. Smith, Ph.D.

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President

APPENDIX: VALUE OF LIFE

The economic methodology for the valuation of life has been found to meet the <u>Daubert</u> and <u>Frye</u> standards by many courts, along with the Rules of Evidence in many states nationwide. My testimony on the value of life has been accepted in approximately 200 state and federal cases nationwide in approximately two-thirds of the states and two-thirds of the federal jurisdictions. Testimony has been accepted by U.S. district and appellate courts as well as in state circuit, appellate, and supreme courts. The <u>Daubert</u> standard sets forth four criteria:

- 1. Testing of the theory and science
- 2. Peer Review
- 3. Known or potential rate of error
- 4. Generally accepted.

Testing of the theory and science has been accomplished over the past four decades, since the 1960s. Dozens of economists of high renown have published over a hundred articles in high quality, peer-reviewed economic journals measuring the value of life. The value of life theories are perhaps among the most well-tested in the field of economics, as evidenced by the enormous body of economic scientific literature that has been published in the field and is discussed below.

Peer Review of the concepts and methodology have been extraordinarily extensive. One excellent review of this extensive, peer-reviewed literature can be found in "The Value of Risks to Life and Health, " W. K. Viscusi, Journal of Economic Literature, Vol. 31, December 1993, pp. 1912-1946. A second is "The Value of a Statistical Life: A Critical Review of Market Estimates throughout the World." W. K. Viscusi and J. E. Aldy, Journal of Risk and Uncertainty, Vol. 27, No. 1, November 2002, pp. 5-76. Additional theoretical and empirical work by Viscusi, a leading researcher in the field, can be found in: "The Value of Life", W. K. Viscusi, John M. Olin Center for Law, Economics, and Business, Harvard Law School, Discussion Paper No. 517, June 2005. An additional peer-reviewed article discusses the application to forensic economics: "The Plausible Range for the Value of Life, "T. R. Miller, Journal of Forensic Economics, Vol. 3, No. 3, Fall 1990, pp. 17-39, which discusses the many dozens of articles published in other peer-reviewed economic journals on this topic. This concept is discussed in detail in "Willingness to Pay Comes of Age: Will the System Survive?" T. R. Miller, Northwestern University Law Review, Summer 1989, pp. 876-907, and "Hedonic Damages in Personal Injury and Wrongful Death

Litigation," by S. V. Smith in <u>Litigation Economics</u>, pp. 39-59. Kenneth Arrow, a Nobel Laureate in economics, discusses this method for valuing life in "Invaluable Goods," <u>Journal of Economic Literature</u>, Vol. 35, No. 2, 1997, pp. 759. See the Meta-Analyses Appendix for an additional review of the literature.

The known or potential rate of error is well researched. All of these articles discuss the known or potential rate of error, well within the acceptable standard in the field of economics, generally using a 95% confidence rate for the statistical testing and acceptance of results. There are few areas in the field of economics where the known or potential rate of error has been as well-accepted and subject to more extensive investigation.

General Acceptance of the concepts and methodology on the value of life in the field of economics is extensive. This methodology is and has been generally accepted in the field of economics for many years. Indeed, according to the prestigious and highly-regarded research institute, The Rand Corporation, by 1988, the peer-reviewed scientific methods for estimating the value of life were well-accepted: "Most economists would agree that the willingness-to-pay methodology is the most conceptually appropriate criterion for establishing the value of life," Computing Economic loss in Cases of Wrongful Death, King and Smith, Rand Institute for Civil Justice, R-3549-ICJ, 1988.

While first discussed in cutting edge, peer-reviewed economic journals, additional proof of general acceptance is now indicated by the fact that this methodology is now taught in standard economics courses at the undergraduate and graduate level throughout hundreds of colleges and universities nationwide as well as the fact that it is taught and discussed in widelyaccepted textbooks in the field of law and economics: Economics, Sixth Edition, David C. Colander, McGraw-Hill Irwin, Boston, 2006, pp. 463-465; this introductory economics textbook is the third most widely used textbook in college courses nationwide. Hamermesh and Rees's The Economics of Work and Pay, Harper-Collins, 1993, Chapter 13, a standard advanced textbook in labor economics, also discusses the methodology for valuing life. Other textbooks discuss this topic as well. Richard Posner, a Justice and former Chief Justice of the U.S. Court of Appeals for the highly regarded 7th Circuit and Senior Lecturer at the University of Chicago Law School, one of most prolific legal writers in America, details the Value of Life approach in his widely used textbooks: Economic Analysis of Law, 1986, Little Brown & Co., pp. 182-185 and Tort Law, 1982, Little Brown & Co., pp. 120-126.

As further evidence of general acceptance in the field, some surveys published in the field of forensic economics show that hundreds of economics nationwide are now familiar with this

methodology and are available to prepare (and critique) forensic economic value of life estimates. Indeed, some economists who indicate they will prepare such analysis for plaintiffs also are willing to critique such analysis for defendants, as I have often done. That an economist is willing to critique a report does not indicate that he or she is opposed to the concept or the methodology, but merely available to assure that the plaintiff economist has employed proper techniques. The fact that there are economists who indicate they do not prepare estimates of value of life is again no indication that they oppose the methodology: many claim they are not familiar with the literature and untrained in this area. While some CPAs and others without a degree in economics have opposed these methods, such professionals do not have the requisite academic training and are unqualified to make such judgements. However, as in any field of economics, this area is not without any dissent. General acceptance does not mean universal acceptance.

Additional evidence of general acceptance in the field is found in the teaching of the concepts regarding the value of life. Forensic Economics is now taught as a special field in a number of institutions nationwide. I taught what is believed to be the first course ever presented in the field of Forensic Economics at DePaul University in Spring, 1990. My own book, Economic/Hedonic Damages, Anderson, 1990, and supplemental updates thereto, coauthored with Dr. Michael Brookshire, a Professor of Economics in West Virginia, has been used as a textbook in at least 5 colleges and universities nationwide in such courses in economics, and has a thorough discussion of the methodology. Toppino et. al., in "Forensic Economics in the Classroom," published in The Earnings Analyst, Journal of the American Rehabilitation Economics Association, Vol. 4, 2001, pp. 53-86, indicate that hedonic damages is one of 15 major topic areas taught in such courses.

Lastly, general acceptance is found by examining publications in the primary journal in the field of Forensic Economics, which is the peer-reviewed Journal of Forensic Economics, where there have been published many articles on the value of life. Some are cited above. Others include: "The Econometric Basis for Estimates of the Value of Life, "W. K. Viscusi, Vol 3, No. 3, Fall 1990, pp. 61-70; "Hedonic Damages in the Courtroom Setting." S. V. Smith, Vol. 3, No. 3, Fall 1990, pp. 41-49; "Issues Affecting the Calculated Value of Life, " E. P. Berla, M. L. Brookshire and S. V. Smith, Vol 3, No. 1, 1990, pp. 1-8; "Hedonic Damages and Personal Injury: A Conceptual Approach. "G. R. Albrecht, Vol. 5., No. 2, Spring/Summer 1992, pp. 97-104; "The Application of the Hedonic Damages Concept to Wrongful and Personal Injury Litigation. "G. R. Albrecht, Vol. 7, No. 2, Spring/Summer 1994, pp. 143-150; and also "A Review of the Monte Carlo Evidence Concerning Hedonic Value of Life Estimates, " R. F. Gilbert, Vol. 8, No. 2, Spring/Summer 1995, pp. 125-130. Professor Ike Mathur, while Chairman of the Department of Finance

at Southern Illinois University wrote an article on how the value of life studies can be used to provide a basis for estimating the value of life per year in application to litigation. This article corroborates my approach: "Estimating Value of Life per Life Year." I. Mathur, Journal of Forensic Economics, Vol. 3, No. 3, 1990, pp. 95-96. As do many of the authors of applications of the value of life literature to litigation economics, Professor Mathur has frequently testified in court, and courts have admitted his testimony.

It is important to note that this methodology is endorsed and employed by the U. S. Government as the standard and recommended approach for use by all U. S. Agencies in valuing life for policy purposes, as mandated in current and past Presidential Executive Orders in effect since 1972, and as discussed in "Report to Congress on the Costs and Benefits of Federal Regulations, " Office of Management and Budget, 1998, and "Economic Analysis of Federal Regulations Under Executive Order 12866," Executive Office of the President, Office of Management and Budget, pp. 1-37, and "Report to the President on Executive Order No. 12866," Regulatory Planning and Review, May 1, 1994, Office of Information and Regulatory Affairs, Office of Management and Budget. Prior presidents signed similar orders as discussed in "Federal Agency Valuations of Human life," Administrative Conference of the United States, Report for Recommendation 88-7, December 1988, pp. 368-408. 926

APPENDIX: META-ANALYSES AND VALUE OF LIFE RESULTS SINCE 2000

Below I list the principal systematic reviews (meta-analyses), since the year 2000, of the value of life literature, and the values of a statistical life that they recommend. In statistics, a meta-analysis combines the results of several studies that address a set of related research hypotheses. Meta-analysis increase the statistical power of studies by analyzing a group of studies and provide a more powerful and accurate data analysis than would result from analyzing each study alone. Based on those reviews, the Summary Table suggests a best estimate. The following table summarizes the studies and their findings.

These statistically based studies place the value between \$4.4 and \$7.5 million, with \$5.9 million in year 2005 dollars representing a conservative yet credible estimate of the average (and range midpoint) of the values of a statistical life published in the studies in year 2005 dollars. Net of human capital, a credible net value of life based on all these literature reviews to be \$4.8 million in year 2005 dollars, or \$5.4 million in year 2008 dollars.

The actual value that I use, \$4.1 million in year 2008 dollars (\$4.5 million in year 2014 dollars) is approximately 24 percent lower than a conservative average estimate based on the credible meta-analyses. This value was originally based on a review conducted in the late 1980s, averaging the results published by that time. I have increased that late 1980s value only by inflation over time, despite the fact a review of literature over the years since that time has put obvious upward pressure on the figure that I use.

VALUE OF STATISTICAL LIFE SUMMARY TABLE

Mean and range of value of statistical life estimates (in 2005 dollars) from the best meta-analyses and systematic reviews since 2000 and characteristics of those reviews.

Study	Formal Meta- Analysis?	Number of Values	Best Estimate (2005 Dollars)	Range	Context
Miller 2000	Yes	68 estimates	\$5.1M	\$4.5- \$6.2M	US estimate from all
Mrozek & Taylor 2002	Yes	203 estimates	\$4.4M	+ or = 35%	Labor market
Viscusi & Aldy 2003	Yes	49 estimates	\$6.5M	\$5.1- \$9.6M	Labor market, US estimate from all
Kochi et al. 2006	Yes	234 estimates	\$6.0M	+ or - 44%	Labor market, survey
Bellavance 2006 (published in 2009)	Yes	37 estimates	\$7.5M	+ or = 19%	Labor market

Adapted from Ted R. Miller's paper "Hedonic Damages," <u>Journal of Forensic Economics</u>, Vol. 20, No. 2 (October 2008), pp. 137-153.

Miller (2000) started from the Miller 1989 JFE estimates and used statistical methods to adjust for differences between studies. It also added newer studies, primarily ones outside the United States. The authors specified the most appropriate study approach a priori, which allowed calculation of a best estimate from the statistical regression. Miller, Ted R, "Variations between Countries in Values of Statistical Life", <u>Journal of Transport Economics and Policy</u>, Vol. 34, No. 2 (May 2000), pp. 169-188.

Mrozek and Taylor (2002) searched intensively for studies of the value of life implied by wages paid for risky jobs. They coded all values from each study rather than a most appropriate estimate. A statistical analysis identified what factors accounted for the differences in values between studies. The authors specified the most appropriate study approach a priori, which allowed calculation of a best estimate from the statistical regression. Mrozek, Janusz R. and Laura O. Taylor, "What Determines the Value of Life? A Meta-Analysis", Journal of Policy Analysis and Management, Vol. 21, No. 2 (2002), pp. 253-270.

Viscusi and Aldy (2003) focused on values from labor market studies that they considered of high quality and that provided data on risk levels and other important explanatory variables. They used statistical methods to account for variations between studies and derive a best estimate. W.K. Viscusi and J.E. Aldy, "The Value of a Statistical Life: A Critical Review of Market Estimates Throughout the World", <u>Journal of Risk and Uncertainty</u>, Vol. 27, No. 1 (2003), pp. 5-76.

Kochi et al. (2006) searched intensively for studies of the value of life implied by wages and coded all values from each study rather than a most appropriate estimate. They did not filter study quality carefully. The best estimate was derived by statistical methods based on the distribution of the values within and across studies. Kochi, Ikuho, Bryan Hubbell, and Randall Kramer, "An Empirical Bayes Approach to Combining and Comparing Estimates of the Value of a Statistical Life for Environmental Policy Analysis", Environmental and Resource Economics, Vol. 34 (2006), pp. 385-406.

Bellavance et al. (2009) focused on values from labor market studies that they considered of high quality and that provided data on risk levels and other important explanatory variables. They used statistical methods to account for variations between studies and derive a best estimate. Bellavance, Francois, Georges Dionne, and Martin Lebeau, "The Value of a Statistical Life: A Meta-Analysis with a Mixed Effects Regression Model," Journal of Health Economics, Vol. 28, Issue 2, (2009), pp. 444-464. 3A22

SUMMARY OF LOSSES FOR "SARAH"

TABLE ****	DESCRIPTION ******************** <u>EARNINGS</u>	ESTIMATE *******	
7 14 17	LOSS OF WAGES & BENEFITS Scenario 1 to age 67 Scenario 2 to age 67 Scenario 3 to age 67	\$1,932,148 \$2,273,436 \$3,279,861	
	PRESENT VALUE OF FUTURE LIFE CARE		
18	COST OF FUTURE LIFE CARE See Page 15 of Life Care Plan	\$ 448,552	
	LOSS OF ENJOYMENT OF LIFE		
21	REDUCTION IN VALUE OF LIFE	\$3,313,843	

The information on this Summary of Losses is intended to summarize losses under certain given assumptions. Please refer to the report and the tables for all the opinions.

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 17 of 77 $_{\tt Table\ 1}$

"SARAH" \$58,361

LOSS OF PAST WAGES - SCENARIO 1 2012 - 2014

YEAR	AGE	WAGES	CUMULATE
****	***	*****	******
2012	19	\$11,186	\$11,186
2013	20	23,151	34,337
2014	21	24,024	\$58,361

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 18 of 77 $_{\tt Table\ 2}$

LOSS OF PAST EMPLOYEE BENEFITS - SCENARIO 1 2012 - 2014

		EMPLOYEE	
YEAR	AGE	BENEFITS	CUMULATE
****	***	*****	*****
2012	19	\$2,897	\$2,897
2013	20	5,996	8,893
2014	21	6,222	\$15,115
"SARAH	n.	\$15,115	

ECONOMIC LOSS TO DATE - SCENARIO 1 2012 - 2014

1.00			EMPLOYEE		
YEAR	AGE	WAGES	BENEFITS	TOTAL	CUMULATE
****	***	*****	*****	*****	*****
2012	19	\$11,186	\$2,897	\$14,083	\$14,083
2013	20	23,151	5,996	29,147	43,230
2014	21	24,024	6,222	30,246	\$73,476
"SARAH	["	\$58,361	\$15,115	\$73,476	

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 20 of 77 $_{\tt Table\ 4}$

PRESENT VALUE OF FUTURE WAGES - SCENARIO 1 2015 - 2075

TEAR AGE WAGES FACTOR VALUE CUMULATE **** *** *** ***** ***** ****** ******						
**** ******** ********* ********* ********** 2015 22 \$24,929 0.98765 \$24,621 \$24,621 2017 24 26,844 0.96342 25,862 75,717 2018 25 27,856 0.95152 26,506 102,223 2019 26 28,906 0.93978 27,165 129,388 2020 27 29,995 0.92817 27,840 157,228 2021 28 31,126 0.91672 28,534 185,762 2022 29 32,299 0.90540 29,244 215,006 2023 30 33,516 0.89422 29,971 244,977 2024 31 34,779 0.88318 30,716 275,693 2025 32 36,090 0.87228 31,481 307,174 2026 33 37,450 0.86151 32,264 339,438 2027 34 38,861 0.85087 33,066 372,504 </th <th></th> <th></th> <th></th> <th>DISCOUNT</th> <th>PRESENT</th> <th></th>				DISCOUNT	PRESENT	
2015 22 \$24,929 0.98765 \$24,621 \$24,621 49,855 2017 24 26,844 0.96342 25,234 49,855 2018 25 27,856 0.95152 26,506 102,223 2019 26 28,906 0.93978 27,165 129,388 2020 27 29,995 0.92817 27,840 157,228 2021 28 31,126 0.91672 28,534 185,762 2022 29 32,299 0.90540 29,244 215,006 2023 30 33,516 0.89422 29,971 244,977 2024 31 34,779 0.88131 30,716 275,693 2025 32 36,090 0.87228 31,481 307,174 2026 33 37,450 0.86151 32,264 339,438 2027 34 38,861 0.85087 33,889 406,393 2028 35 40,326 0.84037 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
2016 23 25,869 0.97546 25,234 49,855 2017 24 26,844 0.96342 25,862 75,717 2018 25 27,856 0.95152 26,506 102,223 2019 26 28,906 0.93978 27,165 129,388 2021 28 31,126 0.91672 28,534 185,762 2022 29 32,299 0.90540 29,244 215,006 2023 30 33,516 0.89422 29,971 244,977 2024 31 34,779 0.88318 30,716 275,693 2025 32 36,090 0.87228 31,481 307,174 2026 33 37,450 0.86151 32,264 339,438 2027 34 38,861 0.85087 33,066 372,504 2028 35 40,326 0.81975 34,650 31,441 124 2030 37 42,263 0.81975 34,454						
2017 24 26,844 0.96342 25,862 75,717 2018 25 27,856 0.95152 26,506 102,223 2019 26 28,906 0.93978 27,165 129,388 2020 27 29,995 0.92817 27,840 157,228 2021 28 31,126 0.91672 28,534 185,762 2022 29 32,299 0.90540 29,244 215,006 2023 30 33,516 0.89422 29,971 244,977 2024 31 34,779 0.88131 30,716 275,693 2025 32 36,090 0.87228 31,481 307,174 2026 33 37,450 0.86151 32,264 339,438 2027 34 38,861 0.85087 33,066 372,504 2028 35 40,326 0.84037 33,889 406,393 2029 36 41,845 0.8299 34,731 44	2015					
2018 25 27,856 0.95152 26,506 102,223 2019 26 28,906 0.93978 27,165 129,388 2020 27 29,995 0.92817 27,880 157,228 2021 28 31,126 0.91672 28,534 185,762 2022 29 32,299 0.90540 29,244 215,006 2023 30 33,516 0.89422 29,971 244,977 2024 31 34,779 0.88318 30,716 275,693 2025 32 36,090 0.87228 31,481 307,174 2026 33 37,450 0.86151 32,264 339,438 2027 34 38,861 0.85087 33,066 372,504 2028 35 40,326 0.84037 33,889 406,393 2029 36 41,845 0.82999 34,731 441,124 2030 37 42,263 0.81975 34,656	2016	23		0,97546		
2019 26 28,906 0.93978 27,165 129,388 2020 27 29,995 0.92617 27,840 157,228 2021 28 31,126 0.91672 28,534 185,762 2022 29 32,299 0.90540 29,244 215,006 2023 30 33,516 0.89422 29,971 244,977 2024 31 34,779 0.88318 30,716 275,693 2025 32 36,090 0.87228 31,481 307,174 2026 33 37,450 0.86151 32,264 339,438 2027 34 38,861 0.85087 33,666 372,504 2028 36 40,326 0.84037 33,889 406,393 2029 36 41,845 0.82999 34,731 441,124 2030 37 42,263 0.81975 34,645 475,769 2031 38 42,666 0.80963 34,560	2017			0.96342		
2020 27 29,995 0.92817 27,840 157,228 2021 28 31,126 0.91672 28,534 185,762 2022 29 32,299 0.90540 29,244 215,006 2023 30 33,516 0.89422 29,971 244,977 2024 31 34,779 0.88318 30,716 275,693 2025 32 36,090 0.87228 31,481 307,176 2026 33 37,450 0.86151 32,264 333,438 2027 34 38,861 0.85087 33,066 372,504 2028 35 40,326 0.81975 34,731 441,124 2030 37 42,263 0.81975 34,645 475,769 2031 38 42,686 0.80963 34,560 510,329 2032 39 43,113 0.79963 34,474 544,803 2033 40 43,544 0.78096 34,389	2018	25		0.95152		
2021 28 31,126 0.91672 28,534 185,762 2022 29 32,299 0.90540 29,244 215,006 2023 30 33,516 0.89422 29,971 244,977 2024 31 34,779 0.88318 30,716 275,693 2025 32 36,090 0.87228 31,481 307,174 2026 33 37,450 0.86151 32,264 339,438 2027 34 38,861 0.85087 33,066 372,504 2028 35 40,326 0.84037 33,889 406,393 2029 36 41,845 0.82999 34,731 441,124 2031 38 42,686 0.80963 34,560 510,329 2032 39 43,113 0.79963 34,474 544,803 2033 40 43,544 0.78976 34,389 579,192 2034 41 43,979 0.77001 34,304	2019		28,906			
2022 29 32,299 0.90540 29,244 215,006 2023 30 33,516 0.89422 29,971 244,977 2024 31 34,779 0.88318 30,716 275,693 2025 32 36,090 0.87228 31,481 307,174 2026 33 37,450 0.86151 32,264 339,438 2027 34 38,861 0.85087 33,066 372,504 2028 35 40,326 0.84037 33,889 406,393 2029 36 41,845 0.82999 34,731 441,124 2030 37 42,263 0.81975 34,645 475,769 2031 38 42,686 0.80963 34,560 510,329 2032 39 43,113 0.79976 34,474 544,96 2033 40 43,544 0.78976 34,389 579,192 2034 41 43,979 0.78001 34,304 6	2020	27	29,995	0.92817	27,840	
2023 30 33,516 0.89422 29,971 244,977 2024 31 34,779 0.88318 30,716 275,693 2025 32 36,090 0.87228 31,481 307,174 2026 33 37,450 0.86151 32,264 339,438 2027 34 38,861 0.85087 33,066 372,504 2028 35 40,326 0.84037 33,889 406,393 2029 36 41,845 0.82999 34,731 441,124 2030 37 42,263 0.81975 34,645 475,769 2031 38 42,686 0.80963 34,560 510,329 2032 39 43,113 0.79963 34,474 544,803 2033 40 43,544 0.78976 34,389 579,192 2034 41 43,979 0.78001 34,304 613,496 2035 42 44,419 0.77038 34,220	2021	28	31,126	0.91672	· ·	
2024 31 34,779 0.88318 30,716 275,693 2025 32 36,090 0.87228 31,481 307,174 2026 33 37,450 0.86151 32,264 339,438 2027 34 38,861 0.85087 33,066 372,504 2028 35 40,326 0.84037 33,889 406,393 2029 36 41,845 0.82999 34,731 441,124 2030 37 42,263 0.81975 34,645 475,769 2031 38 42,686 0.80963 34,560 510,329 2032 39 43,113 0.79963 34,474 544,803 2033 40 43,544 0.78976 34,389 579,192 2034 41 43,979 0.78001 34,304 613,496 2035 42 44,419 0.77038 34,220 647,716 2036 43 44,863 0.76087 34,135	2022	29	32,299	0.90540		
2025 32 36,090 0.87228 31,481 307,174 2026 33 37,450 0.86151 32,264 339,438 2027 34 38,861 0.85087 33,066 372,504 2028 35 40,326 0.84937 33,889 406,393 2029 36 41,845 0.82999 34,731 441,124 2030 37 42,263 0.81975 34,645 475,769 2031 38 42,686 0.80963 34,560 510,329 2032 39 43,113 0.79963 34,474 544,803 2033 40 43,544 0.78976 34,389 579,192 2034 41 43,979 0.78001 34,304 613,496 2035 42 44,419 0.77038 34,220 647,716 2037 44 45,312 0.75147 34,051 715,902 2038 45 45,765 0.74220 33,967	2023	30	33,516	0.89422		
2026 33 37,450 0.86151 32,264 339,438 2027 34 38,861 0.85087 33,066 372,504 2028 35 40,326 0.84037 33,889 406,392 2029 36 41,845 0.82999 34,731 441,124 2030 37 42,263 0.81975 34,645 475,769 2031 38 42,686 0.80963 34,560 510,329 2032 39 43,113 0.79963 34,474 544,803 2033 40 43,544 0.78976 34,389 579,192 2034 41 43,979 0.78001 34,304 613,496 2035 42 44,419 0.77038 34,220 647,716 2036 43 44,863 0.76087 34,135 681,851 2037 44 45,312 0.75147 34,051 715,902 2038 45 45,765 0.74220 33,633	2024	31	34,779	0.88318	30,716	275,693
2027 34 38,861 0.85087 33,066 372,504 2028 35 40,326 0.84037 33,889 406,393 2029 36 41,845 0.82999 34,731 441,124 2030 37 42,263 0.81975 34,645 475,769 2031 38 42,686 0.80963 34,560 510,329 2032 39 43,113 0.79963 34,474 544,803 2033 40 43,544 0.78976 34,389 579,192 2034 41 43,979 0.78001 34,304 613,496 2035 42 44,419 0.77038 34,220 647,716 2036 43 44,863 0.76087 34,135 681,851 2037 44 45,312 0.75147 34,051 715,902 2038 45 45,765 0.74220 33,967 749,869 2039 46 46,223 0.73303 33,633	2025	32	36,090	0.87228		
2028 35 40,326 0.84037 33,889 406,393 2029 36 41,845 0.82999 34,731 441,124 2030 37 42,263 0.81975 34,645 475,769 2031 38 42,686 0.80963 34,560 510,329 2032 39 43,113 0.79963 34,474 544,803 2033 40 43,544 0.78976 34,389 579,192 2034 41 43,979 0.78001 34,304 613,496 2035 42 44,419 0.77038 34,220 647,716 2036 43 44,863 0.76087 34,135 681,851 2037 44 45,312 0.75147 34,051 715,902 2038 45 45,765 0.74220 33,967 749,869 2039 46 46,223 0.73303 33,883 783,752 2040 47 46,685 0.7258 33,716 8	2026	33	37,450	0.86151	32,264	339,438
2029 36 41,845 0.82999 34,731 441,124 2030 37 42,263 0.81975 34,645 475,769 2031 38 42,686 0.80963 34,560 510,329 2032 39 43,113 0.79963 34,474 544,803 2033 40 43,544 0.78976 34,389 579,192 2034 41 43,979 0.78001 34,304 613,496 2035 42 44,419 0.77038 34,220 647,716 2036 43 44,863 0.76087 34,135 681,851 2037 44 45,312 0.75147 34,051 715,902 2038 45 45,765 0.74220 33,967 749,869 2039 46 46,223 0.73303 33,883 783,752 2040 47 46,685 0.72398 33,716 851,267 2041 48 47,152 0.71505 33,633	2027	34	38,861	0.85087	33,066	372,504
2030 37 42,263 0.81975 34,645 475,769 2031 38 42,686 0.80963 34,560 510,329 2032 39 43,113 0.79963 34,474 544,803 2033 40 43,544 0.78976 34,389 579,192 2034 41 43,979 0.78001 34,304 613,496 2035 42 44,419 0.77038 34,220 647,716 2036 43 44,863 0.76087 34,135 681,851 2037 44 45,312 0.75147 34,051 715,902 2038 45 45,765 0.74220 33,967 749,869 2039 46 46,223 0.73303 33,883 783,752 2041 48 47,152 0.71505 33,716 851,267 2042 49 47,624 0.70622 33,633 884,900 2043 50 48,581 0.68989 33,467	2028	35	40,326	0.84037	33,889	406,393
2031 38 42,686 0.80963 34,560 510,329 2032 39 43,113 0.79963 34,474 544,803 2033 40 43,544 0.78976 34,389 579,192 2034 41 43,979 0.78001 34,304 613,496 2035 42 44,419 0.77038 34,220 647,716 2036 43 44,863 0.76087 34,135 681,851 2037 44 45,312 0.75147 34,051 715,902 2038 45 45,765 0.74220 33,967 749,869 2039 46 46,223 0.73303 33,883 783,752 2040 47 46,685 0.72398 33,799 817,551 2041 48 47,152 0.71505 33,716 851,267 2042 49 47,624 0.70622 33,633 884,900 2043 50 48,100 0.69750 33,550	2029	36	41,845	0.82999	34,731	441,124
2032 39 43,113 0.79963 34,474 544,803 2033 40 43,544 0.78976 34,389 579,192 2034 41 43,979 0.78001 34,304 613,496 2035 42 44,419 0.77038 34,220 647,716 2036 43 44,863 0.76087 34,135 681,851 2037 44 45,312 0.75147 34,051 715,902 2038 45 45,765 0.74220 33,967 749,869 2039 46 46,223 0.73303 33,883 783,752 2040 47 46,685 0.72398 33,799 817,551 2041 48 47,152 0.71505 33,633 884,900 2042 49 47,624 0.70622 33,633 884,900 2043 50 48,160 0.69750 33,550 918,450 2044 51 48,581 0.68889 33,467	2030	37	42,263	0.81975	34,645	475,769
2033 40 43,544 0.78976 34,389 579,192 2034 41 43,979 0.78001 34,304 613,496 2035 42 44,419 0.77038 34,220 647,716 2036 43 44,863 0.76087 34,135 681,851 2037 44 45,312 0.75147 34,051 715,902 2038 45 45,765 0.74220 33,967 749,869 2039 46 46,223 0.73303 33,883 783,752 2040 47 46,685 0.72398 33,799 817,551 2041 48 47,152 0.71505 33,633 884,900 2042 49 47,624 0.70622 33,633 884,900 2043 50 48,100 0.69750 33,550 918,450 2044 51 48,581 0.68089 33,467 951,917 2045 52 49,067 0.68038 33,3467 <td< td=""><td>2031</td><td>38</td><td>42,686</td><td>0.80963</td><td>34,560</td><td>510,329</td></td<>	2031	38	42,686	0.80963	34,560	510,329
2034 41 43,979 0.78001 34,304 613,496 2035 42 44,419 0.77038 34,220 647,716 2036 43 44,863 0.76087 34,135 681,851 2037 44 45,312 0.75147 34,051 715,902 2038 45 45,765 0.74220 33,967 749,869 2039 46 46,223 0.73303 33,883 783,752 2040 47 46,685 0.72398 33,799 817,551 2041 48 47,152 0.71505 33,716 851,267 2042 49 47,624 0.70622 33,633 884,900 2043 50 48,100 0.69750 33,550 918,450 2044 51 48,581 0.68889 33,467 951,917 2045 52 49,067 0.68038 33,302 1,018,603 2047 54 50,055 0.65549 33,138 1,084,961 2049 56 51,061 0.64740 33,057	2032	39	43,113	0.79963	34,474	544,803
2035 42 44,419 0.77038 34,220 647,716 2036 43 44,863 0.76087 34,135 681,851 2037 44 45,312 0.75147 34,051 715,902 2038 45 45,765 0.74220 33,967 749,869 2039 46 46,223 0.73303 33,883 783,752 2040 47 46,685 0.72398 33,716 851,267 2041 48 47,152 0.71505 33,716 851,267 2042 49 47,624 0.70622 33,633 884,900 2043 50 48,100 0.69750 33,550 918,450 2044 51 48,581 0.68889 33,467 951,917 2045 52 49,067 0.68038 33,302 1,018,603 2047 54 50,054 0.66369 33,220 1,051,823 2048 55 50,555 0.65549 33,138 1,084,961 2049 56 51,061 0.64740 33,057	2033	40	43,544	0.78976	34,389	579,192
2036 43 44,863 0.76087 34,135 681,851 2037 44 45,312 0.75147 34,051 715,902 2038 45 45,765 0.74220 33,967 749,869 2039 46 46,223 0.73303 33,883 783,752 2040 47 46,685 0.72398 33,799 817,551 2041 48 47,152 0.71505 33,716 851,267 2042 49 47,624 0.70622 33,633 884,900 2043 50 48,100 0.69750 33,550 918,450 2044 51 48,581 0.68889 33,467 951,917 2045 52 49,067 0.68038 33,384 985,301 2045 52 49,067 0.68038 33,302 1,018,603 2047 54 50,054 0.66369 33,220 1,051,823 2048 55 50,555 0.65549 33,138 1,084,961 2049 56 51,061 0.64740 33,057	2034	41	43,979	0.78001	34,304	613,496
2037 44 45,312 0.75147 34,051 715,902 2038 45 45,765 0.74220 33,967 749,869 2039 46 46,223 0.73303 33,883 783,752 2040 47 46,685 0.72398 33,799 817,551 2041 48 47,152 0.71505 33,716 851,267 2042 49 47,624 0.70622 33,633 884,900 2043 50 48,100 0.69750 33,550 918,450 2044 51 48,581 0.68889 33,467 951,917 2045 52 49,067 0.68038 33,384 985,301 2046 53 49,558 0.67198 33,322 1,018,603 2047 54 50,054 0.66369 33,220 1,051,823 2048 55 50,555 0.65549 33,138 1,084,961 2049 56 51,061 0.64740 33,057 1,118,018 2050 57 51,572 0.63941 32,976	2035	42	44,419	0.77038	34,220	647,716
2038 45 45,765 0.74220 33,967 749,869 2039 46 46,223 0.73303 33,883 783,752 2040 47 46,685 0.72398 33,799 817,551 2041 48 47,152 0.71505 33,716 851,267 2042 49 47,624 0.70622 33,633 884,900 2043 50 48,100 0.69750 33,550 918,450 2044 51 48,581 0.68889 33,467 951,917 2045 52 49,067 0.68038 33,384 985,301 2046 53 49,558 0.67198 33,302 1,018,603 2047 54 50,054 0.66369 33,220 1,051,823 2048 55 50,555 0.65549 33,138 1,084,961 2049 56 51,061 0.64740 33,057 1,118,018 2050 57 51,572 0.63941 32,976 1,150,994 2051 58 52,088 0.63152 32,895	2036	43	44,863	0.76087	34,135	681,851
2039 46 46,223 0.73303 33,883 783,752 2040 47 46,685 0.72398 33,799 817,551 2041 48 47,152 0.71505 33,716 851,267 2042 49 47,624 0.70622 33,633 884,900 2043 50 48,100 0.69750 33,550 918,450 2044 51 48,581 0.68889 33,467 951,917 2045 52 49,067 0.68038 33,302 1,018,603 2046 53 49,558 0.67198 33,302 1,018,603 2047 54 50,054 0.66369 33,220 1,051,823 2048 55 50,555 0.65549 33,138 1,084,961 2049 56 51,061 0.64740 33,057 1,118,018 2050 57 51,572 0.63941 32,976 1,150,994 2051 58 52,088 0.63152 32,895 1,183,889 2052 59 52,609 0.62372 32,813<	2037	44	45,312	0.75147	34,051	715,902
2040 47 46,685 0.72398 33,799 817,551 2041 48 47,152 0.71505 33,716 851,267 2042 49 47,624 0.70622 33,633 884,900 2043 50 48,100 0.69750 33,550 918,450 2044 51 48,581 0.68889 33,467 951,917 2045 52 49,067 0.68038 33,384 985,301 2046 53 49,558 0.67198 33,302 1,018,603 2047 54 50,054 0.66369 33,138 1,084,961 2048 55 50,555 0.65549 33,138 1,084,961 2049 56 51,061 0.64740 33,057 1,118,018 2050 57 51,572 0.63941 32,976 1,150,994 2051 58 52,088 0.63152 32,895 1,183,889 2052 59 52,609 0.62372 32,813 1,216,702 2053 60 53,135 0.61602 32,732<	2038	45	45,765	0.74220	33,967	749,869
2041 48 47,152 0.71505 33,716 851,267 2042 49 47,624 0.70622 33,633 884,900 2043 50 48,100 0.69750 33,550 918,450 2044 51 48,581 0.68889 33,467 951,917 2045 52 49,067 0.68038 33,384 985,301 2046 53 49,558 0.67198 33,302 1,018,603 2047 54 50,054 0.66369 33,220 1,051,823 2048 55 50,555 0.65549 33,138 1,084,961 2049 56 51,061 0.64740 33,057 1,118,018 2050 57 51,572 0.63941 32,976 1,150,994 2051 58 52,088 0.63152 32,895 1,183,889 2052 59 52,609 0.62372 32,813 1,216,702 2053 60 53,135 0.61602 32,732 1,249,434 2054 61 53,666 0.60841 32,65	2039	46	46,223	0.73303	33,883	783,752
2042 49 47,624 0.70622 33,633 884,900 2043 50 48,100 0.69750 33,550 918,450 2044 51 48,581 0.68889 33,467 951,917 2045 52 49,067 0.68038 33,384 985,301 2046 53 49,558 0.67198 33,302 1,018,603 2047 54 50,054 0.66369 33,220 1,051,823 2048 55 50,555 0.65549 33,138 1,084,961 2049 56 51,061 0.64740 33,057 1,118,018 2050 57 51,572 0.63941 32,976 1,150,994 2051 58 52,088 0.63152 32,895 1,183,889 2052 59 52,609 0.62372 32,813 1,216,702 2053 60 53,135 0.61602 32,732 1,249,434 2054 61 53,666 0.60841 32,651 1,282,085 2055 62 54,203 0.5090 32,5	2040	47	46,685	0.72398	33,799	817,551
2043 50 48,100 0.69750 33,550 918,450 2044 51 48,581 0.68889 33,467 951,917 2045 52 49,067 0.68038 33,384 985,301 2046 53 49,558 0.67198 33,302 1,018,603 2047 54 50,054 0.66369 33,220 1,051,823 2048 55 50,555 0.65549 33,138 1,084,961 2049 56 51,061 0.64740 33,057 1,118,018 2050 57 51,572 0.63941 32,976 1,150,994 2051 58 52,088 0.63152 32,895 1,183,889 2052 59 52,609 0.62372 32,813 1,216,702 2053 60 53,135 0.61602 32,732 1,249,434 2054 61 53,666 0.60841 32,651 1,282,085 2055 62 54,203 0.60090 32,571 1,314,656 2057 64 55,292 0.58616 3	2041	48	47,152	0.71505	33,716	851,267
2044 51 48,581 0.688889 33,467 951,917 2045 52 49,067 0.68038 33,384 985,301 2046 53 49,558 0.67198 33,302 1,018,603 2047 54 50,054 0.66369 33,220 1,051,823 2048 55 50,555 0.65549 33,138 1,084,961 2049 56 51,061 0.64740 33,057 1,118,018 2050 57 51,572 0.63941 32,976 1,150,994 2051 58 52,088 0.63152 32,895 1,183,889 2052 59 52,609 0.62372 32,813 1,216,702 2053 60 53,135 0.61602 32,732 1,249,434 2054 61 53,666 0.60841 32,651 1,282,085 2055 62 54,203 0.60090 32,571 1,314,656 2056 63 54,745 0.59348 32,490 1,347,146 2057 64 55,292 0.58616 <t< td=""><td>2042</td><td>49</td><td>47,624</td><td>0.70622</td><td>33,633</td><td>884,900</td></t<>	2042	49	47,624	0.70622	33,633	884,900
2045 52 49,067 0.68038 33,384 985,301 2046 53 49,558 0.67198 33,302 1,018,603 2047 54 50,054 0.66369 33,220 1,051,823 2048 55 50,555 0.65549 33,138 1,084,961 2049 56 51,061 0.64740 33,057 1,118,018 2050 57 51,572 0.63941 32,976 1,150,994 2051 58 52,088 0.63152 32,895 1,183,889 2052 59 52,609 0.62372 32,813 1,216,702 2053 60 53,135 0.61602 32,732 1,249,434 2054 61 53,666 0.60841 32,651 1,282,085 2055 62 54,203 0.60090 32,571 1,314,656 2056 63 54,745 0.59348 32,490 1,347,146 2057 64 55,292 0.58616 32,410 1,379,556 2058 65 56,403 0.57177 <	2043	50	48,100	0.69750	33,550	918,450
2046 53 49,558 0.67198 33,302 1,018,603 2047 54 50,054 0.66369 33,220 1,051,823 2048 55 50,555 0.65549 33,138 1,084,961 2049 56 51,061 0.64740 33,057 1,118,018 2050 57 51,572 0.63941 32,976 1,150,994 2051 58 52,088 0.63152 32,895 1,183,889 2052 59 52,609 0.62372 32,813 1,216,702 2053 60 53,135 0.61602 32,732 1,249,434 2054 61 53,666 0.60841 32,651 1,282,085 2055 62 54,203 0.60090 32,571 1,314,656 2056 63 54,745 0.59348 32,490 1,347,146 2057 64 55,292 0.58616 32,410 1,379,556 2058 65 55,845 0.57892 32,330 1,411,886 2059 66 56,403 0.57177	2044	51	48,581	0.68889	33,467	951,917
2047 54 50,054 0.66369 33,220 1,051,823 2048 55 50,555 0.65549 33,138 1,084,961 2049 56 51,061 0.64740 33,057 1,118,018 2050 57 51,572 0.63941 32,976 1,150,994 2051 58 52,088 0.63152 32,895 1,183,889 2052 59 52,609 0.62372 32,813 1,216,702 2053 60 53,135 0.61602 32,732 1,249,434 2054 61 53,666 0.60841 32,651 1,282,085 2055 62 54,203 0.60090 32,571 1,314,656 2056 63 54,745 0.59348 32,490 1,347,146 2057 64 55,292 0.58616 32,410 1,379,556 2058 65 55,845 0.57892 32,330 1,411,886 2059 66 56,403 0.57177 32,250 1,444,136 2061 68 57,537 0.55774	2045	52	49,067	0.68038	33,384	985,301
2048 55 50,555 0.65549 33,138 1,084,961 2049 56 51,061 0.64740 33,057 1,118,018 2050 57 51,572 0.63941 32,976 1,150,994 2051 58 52,088 0.63152 32,895 1,183,889 2052 59 52,609 0.62372 32,813 1,216,702 2053 60 53,135 0.61602 32,732 1,249,434 2054 61 53,666 0.60841 32,651 1,282,085 2055 62 54,203 0.60090 32,571 1,314,656 2056 63 54,745 0.59348 32,490 1,347,146 2057 64 55,292 0.58616 32,410 1,379,556 2058 65 55,845 0.57892 32,330 1,411,886 2059 66 56,403 0.57177 32,250 1,444,136 2060 67 56,967 0.56471 32,170 1,508,397 2062 69 58,112 0.55086	2046	53	49,558	0.67198	33,302	1,018,603
2049 56 51,061 0.64740 33,057 1,118,018 2050 57 51,572 0.63941 32,976 1,150,994 2051 58 52,088 0.63152 32,895 1,183,889 2052 59 52,609 0.62372 32,813 1,216,702 2053 60 53,135 0.61602 32,732 1,249,434 2054 61 53,666 0.60841 32,651 1,282,085 2055 62 54,203 0.60090 32,571 1,314,656 2056 63 54,745 0.59348 32,490 1,347,146 2057 64 55,292 0.58616 32,410 1,379,556 2058 65 55,845 0.57892 32,330 1,411,886 2059 66 56,403 0.57177 32,250 1,444,136 2060 67 56,967 0.56471 32,170 1,476,306 2061 68 57,537 0.55774 32,091 1,508,397 2062 69 58,112 0.55086	2047	54	50,054	0.66369	33,220	1,051,823
2050 57 51,572 0.63941 32,976 1,150,994 2051 58 52,088 0.63152 32,895 1,183,889 2052 59 52,609 0.62372 32,813 1,216,702 2053 60 53,135 0.61602 32,732 1,249,434 2054 61 53,666 0.60841 32,651 1,282,085 2055 62 54,203 0.60090 32,571 1,314,656 2056 63 54,745 0.59348 32,490 1,347,146 2057 64 55,292 0.58616 32,410 1,379,556 2058 65 55,845 0.57892 32,330 1,411,886 2059 66 56,403 0.57177 32,250 1,444,136 2060 67 56,967 0.56471 32,170 1,476,306 2061 68 57,537 0.55774 32,091 1,508,397 2062 69 58,112 0.55086 32,012 1,540,409 2063 70 58,693 0.54406	2048	55	50,555	0.65549	33,138	1,084,961
2051 58 52,088 0.63152 32,895 1,183,889 2052 59 52,609 0.62372 32,813 1,216,702 2053 60 53,135 0.61602 32,732 1,249,434 2054 61 53,666 0.60841 32,651 1,282,085 2055 62 54,203 0.60090 32,571 1,314,656 2056 63 54,745 0.59348 32,490 1,347,146 2057 64 55,292 0.58616 32,410 1,379,556 2058 65 55,845 0.57892 32,330 1,411,886 2059 66 56,403 0.57177 32,250 1,444,136 2060 67 56,967 0.56471 32,170 1,476,306 2061 68 57,537 0.55774 32,091 1,508,397 2062 69 58,112 0.55086 32,012 1,540,409 2063 70 58,693 0.54406 31,933 1,572,342	2049	56	51,061	0.64740	33,057	1,118,018
2052 59 52,609 0.62372 32,813 1,216,702 2053 60 53,135 0.61602 32,732 1,249,434 2054 61 53,666 0.60841 32,651 1,282,085 2055 62 54,203 0.60090 32,571 1,314,656 2056 63 54,745 0.59348 32,490 1,347,146 2057 64 55,292 0.58616 32,410 1,379,556 2058 65 55,845 0.57892 32,330 1,411,886 2059 66 56,403 0.57177 32,250 1,444,136 2060 67 56,967 0.56471 32,170 1,476,306 2061 68 57,537 0.55774 32,091 1,508,397 2062 69 58,112 0.55086 32,012 1,540,409 2063 70 58,693 0.54406 31,933 1,572,342	2050	57	51,572	0.63941	32,976	1,150,994
2053 60 53,135 0.61602 32,732 1,249,434 2054 61 53,666 0.60841 32,651 1,282,085 2055 62 54,203 0.60090 32,571 1,314,656 2056 63 54,745 0.59348 32,490 1,347,146 2057 64 55,292 0.58616 32,410 1,379,556 2058 65 55,845 0.57892 32,330 1,411,886 2059 66 56,403 0.57177 32,250 1,444,136 2060 67 56,967 0.56471 32,170 1,476,306 2061 68 57,537 0.55774 32,091 1,508,397 2062 69 58,112 0.55086 32,012 1,540,409 2063 70 58,693 0.54406 31,933 1,572,342	2051	58	52,088	0.63152	32,895	1,183,889
2054 61 53,666 0.60841 32,651 1,282,085 2055 62 54,203 0.60090 32,571 1,314,656 2056 63 54,745 0.59348 32,490 1,347,146 2057 64 55,292 0.58616 32,410 1,379,556 2058 65 55,845 0.57892 32,330 1,411,886 2059 66 56,403 0.57177 32,250 1,444,136 2060 67 56,967 0.56471 32,170 1,476,306 2061 68 57,537 0.55774 32,091 1,508,397 2062 69 58,112 0.55086 32,012 1,540,409 2063 70 58,693 0.54406 31,933 1,572,342	2052	59	52,609	0.62372	32,813	1,216,702
2055 62 54,203 0.60090 32,571 1,314,656 2056 63 54,745 0.59348 32,490 1,347,146 2057 64 55,292 0.58616 32,410 1,379,556 2058 65 55,845 0.57892 32,330 1,411,886 2059 66 56,403 0.57177 32,250 1,444,136 2060 67 56,967 0.56471 32,170 1,476,306 2061 68 57,537 0.55774 32,091 1,508,397 2062 69 58,112 0.55086 32,012 1,540,409 2063 70 58,693 0.54406 31,933 1,572,342	2053	60	53,135	0.61602	32,732	1,249,434
2056 63 54,745 0.59348 32,490 1,347,146 2057 64 55,292 0.58616 32,410 1,379,556 2058 65 55,845 0.57892 32,330 1,411,886 2059 66 56,403 0.57177 32,250 1,444,136 2060 67 56,967 0.56471 32,170 1,476,306 2061 68 57,537 0.55774 32,091 1,508,397 2062 69 58,112 0.55086 32,012 1,540,409 2063 70 58,693 0.54406 31,933 1,572,342	2054	61	53,666	0.60841	32,651	1,282,085
2057 64 55,292 0.58616 32,410 1,379,556 2058 65 55,845 0.57892 32,330 1,411,886 2059 66 56,403 0.57177 32,250 1,444,136 2060 67 56,967 0.56471 32,170 1,476,306 2061 68 57,537 0.55774 32,091 1,508,397 2062 69 58,112 0.55086 32,012 1,540,409 2063 70 58,693 0.54406 31,933 1,572,342	2055	62	54,203	0.60090	32,571	1,314,656
2058 65 55,845 0.57892 32,330 1,411,886 2059 66 56,403 0.57177 32,250 1,444,136 2060 67 56,967 0.56471 32,170 1,476,306 2061 68 57,537 0.55774 32,091 1,508,397 2062 69 58,112 0.55086 32,012 1,540,409 2063 70 58,693 0.54406 31,933 1,572,342	2056	63	54,745	0.59348	32,490	1,347,146
2059 66 56,403 0.57177 32,250 1,444,136 2060 67 56,967 0.56471 32,170 1,476,306 2061 68 57,537 0.55774 32,091 1,508,397 2062 69 58,112 0.55086 32,012 1,540,409 2063 70 58,693 0.54406 31,933 1,572,342	2057	64	55,292	0.58616	32,410	1,379,556
2060 67 56,967 0.56471 32,170 1,476,306 2061 68 57,537 0.55774 32,091 1,508,397 2062 69 58,112 0.55086 32,012 1,540,409 2063 70 58,693 0.54406 31,933 1,572,342	2058	65	55,845	0.57892	32,330	1,411,886
2060 67 56,967 0.56471 32,170 1,476,306 2061 68 57,537 0.55774 32,091 1,508,397 2062 69 58,112 0.55086 32,012 1,540,409 2063 70 58,693 0.54406 31,933 1,572,342	2059	66	56,403	0.57177	32,250	1,444,136
2061 68 57,537 0.55774 32,091 1,508,397 2062 69 58,112 0.55086 32,012 1,540,409 2063 70 58,693 0.54406 31,933 1,572,342	2060	67	56,967	0.56471	32,170	1,476,306
2062 69 58,112 0.55086 32,012 1,540,409 2063 70 58,693 0.54406 31,933 1,572,342				0.55774	32,091	1,508,397
2063 70 58,693 0.54406 31,933 1,572,342		69		0.55086	32,012	1,540,409
		70		0.54406	31,933	1,572,342
	2064	71	59,280	0.53734	31,854	1,604,196

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 21 of 77 $_{\tt Table\ 4\ (Cont.)}$

PRESENT VALUE OF FUTURE WAGES - SCENARIO 1 2015 - 2075

			DISCOUNT	PRESENT	
YEAR	AGE	WAGES	FACTOR	VALUE	CUMULATE
***	***	*****	******	******	******
2065	72	59,873	0.53071	31,775	1,635,971
2066	73	60,472	0.52415	31,696	1,667,667
2067	74	61,077	0.51768	31,618	1,699,285
2068	75	61,688	0.51129	31,540	1,730,825
2069	76	62,305	0.50498	31,463	1,762,288
2070	77	62,928	0.49874	31,385	1,793,673
2071	78	63,557	0.49259	31,308	1,824,981
2072	79	64,193	0.48651	31,231	1,856,212
2073	80	64,835	0.48050	31,153	1,887,365
2074	81	65,483	0.47457	31,076	1,918,441
2075	82	58,709	0.46936	27,556	\$1,945,997

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\$1,945,997

PRESENT VALUE OF FUTURE EMPLOYEE BENEFITS - SCENARIO 1 2015 - 2075

		EMDI OVER	DICCOINT	DDECENT	
YEAR	AGE	EMPLOYEE	DISCOUNT FACTOR	PRESENT VALUE	CITMITT A THE
****	***	BENEFITS ******	*******	******	CUMULATE
2015	22	\$6,457	0.98765	\$6,377	\$6,377
2015	23	6,700	0.97546	6,536	12,913
2017	24	6,953	0.96342	6,699	19,612
2018	25	7,215	0.95152	6,865	26,477
2019	26	7,213	0.93978	7,036	33,513
2020	27	7,769	0.92817	7,211	40,724
2021	28	8,062	0.91672	7,391	48,115
2022	29	8,365	0.90540	7,574	55,689
2023	30	8,681	0.89422	7,763	63,452
2024	31	9,008	0.88318	7,956	71,408
2025	32	9,347	0.87228	8,153	79,561
2026	33	9,700	0.86151	8,357	87,918
2027	34	10,065	0.85087	8,564	96,482
2028	35	10,444	0.84037	8,777	105,259
2029	36	10,838	0.82999	8,995	114,254
2030	37	10,946	0.81975	8,973	123,227
2031	38	11,056	0.80963	8,951	132,178
2032	39	11,166	0.79963	8,929	141,107
2033	40	11,278	0.78976	8,907	150,014
2034	41	11,391	0.78001	8,885	158,899
2035	42	11,505	0.77038	8,863	167,762
2036	43	11,620	0.76087	8,841	176,603
2037	44	11,736	0.75147	8,819	185,422
2038	45	11,853	0.74220	8,797	194,219
2039	46	11,972	0.73303	8,776	202,995
2040	47	12,091	0.72398	8,754	211,749
2041	48	12,212	0.71505	8,732	220,481
2042	49	12,335	0.70622	8,711	229,192
2043	50	12,458	0.69750	8,689	237,881
2044	51	12,582	0.68889	8,668	246,549
2045	52	12,708	0.68038	8,646	255,195
2046	53	12,836	0.67198	8,626	263,821
2047	54	12,964	0.66369	8,604	272,425
2048	55	13,094	0.65549	8,583	281,008
2049	56	13,225	0.64740	8,562	289,570
2050	57	13,357	0.63941	8,541	298,111
2051	58	13,491	0.63152	8,520	306,631
2052	59	13,626	0.62372	8,499	315,130
2053	60	13,762	0.61602	8,478	323,608
2054	61	13,899	0.60841	8,456	332,064
2055	62	14,039	0.60090	8,436	340,500
2056	63	14,179	0.59348	8,415	348,915
2057	64	14,321	0.58616	8,394	357,309
2058	65	14,464	0.57892	8,373	365,682
2059	66	14,608	0.57177	8,352	374,034
2060	67	14,754	0.56471	8,332	382,366
2061	68	14,902	0.55774	8,311	390,677
2062	69	15,051	0.55086	8,291	398,968
2063	70	15,201	0.54406	8,270	407,238
2064	71	15,354	0.53734	8,250	415,488

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 23 of 77 $_{\tt Table\ 5\ (Cont.)}$

PRESENT VALUE OF FUTURE EMPLOYEE BENEFITS - SCENARIO 1 2015 - 2075

	EMPLOYEE	DISCOUNT	PRESENT	
AGE	BENEFITS	FACTOR	VALUE	CUMULATE
***	*****	******	*****	*****
72	15,507	0.53071	8,230	423,718
73	15,662	0.52415	8,209	431,927
74	15,819	0.51768	8,189	440,116
75	15,977	0.51129	8,169	448,285
76	16,137	0.50498	8,149	456,434
77	16,298	0.49874	8,128	464,562
78	16,461	0.49259	8,109	472,671
79	16,626	0.48651	8,089	480,760
80	16,792	0.48050	8,069	488,829
81	16,960	0.47457	8,049	496,878
82	15,206	0.46936	7,137	\$504,015
	*** 72 73 74 75 76 77 78 79 80 81	AGE BENEFITS *** ****** 72 15,507 73 15,662 74 15,819 75 15,977 76 16,137 77 16,298 78 16,461 79 16,626 80 16,792 81 16,960	AGE BENEFITS FACTOR *** ****** ****** 72 15,507 0.53071 73 15,662 0.52415 74 15,819 0.51768 75 15,977 0.51129 76 16,137 0.50498 77 16,298 0.49874 78 16,461 0.49259 79 16,626 0.48651 80 16,792 0.48050 81 16,960 0.47457	AGE BENEFITS FACTOR VALUE *** ******* ******* ******* 72 15,507 0.53071 8,230 73 15,662 0.52415 8,209 74 15,819 0.51768 8,189 75 15,977 0.51129 8,169 76 16,137 0.50498 8,149 77 16,298 0.49874 8,128 78 16,461 0.49259 8,109 79 16,626 0.48651 8,089 80 16,792 0.48050 8,069 81 16,960 0.47457 8,049

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\$504,015

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 24 of 77 $_{\tt Table\ 6}$

PRESENT VALUE OF FUTURE WAGE AND BENEFIT LOSS = SCENARIO 1 2015 - 2075

			EMPLOYEE		
YEAR	AGE	WAGES	BENEFITS	TOTAL	CUMULATE
****	***	******	******	******	*******
2015	22	\$24,621	\$6,377	\$30,998	\$30,998
2016	23	25,234	6,536	31,770	62,768
2017	24	25,862	6,699	32,561	95,329
2018	25	26,506	6,865	33,371	128,700
2019	26	27,165	7,036	34,201	162,901
2020	27	27,840	7,211	35,051	197,952
2021	28	28,534	7,391	35,925	233,877
2022	29	29,244	7,574	36,818	270,695
2023	30	29,971	7,763	37,734	308,429
2024	31	30,716	7,956	38,672	347,101
2025	32	31,481	8,153	39,634	386,735
2026	33	32,264	8,357	40,621	427,356
2027	34	33,066	8,564	41,630	468,986
2028	35	33,889	8,777	42,666	511,652
2029	36	34,731	8,995	43,726	555,378
2030	37	34,645	8,973	43,618	598,996
2031	38	34,560	8,951	43,511	642,507
2032	39	34,474	8,929	43,403	685,910
2033	40	34,389	8,907	43,296	729,206
2034	41	34,304	8,885	43,189	772,395
2035	42	34,220	8,863	43,083	815,478
2036	43	34,135	8,841	42,976	858,454
2037	44	34,051	8,819	42,870	901,324
2038	45	33,967	8,797	42,764	944,088
2039	46	33,883	8,776	42,659	986,747
2040	47	33,799	8,754	42,553	1,029,300
2041	48	33,716	8,732	42,448	1,071,748
2042	49	33,633	8,711	42,344	1,114,092
2043	50	33,550	8,689	42,239	1,156,331
2044	51	33,467	8,668	42,135	1,198,466
2045	52	33,384	8,646	42,030	1,240,496
2046	53	33,302	8,626	41,928	1,282,424
2047	54	33,220	8,604	41,824	1,324,248
2048	55	33,138	8,583	41,721	1,365,969
2049	56	33,057	8,562	41,619	1,407,588
2050	57	32,976	8,541	41,517	1,449,105
2051	58	32,895	8,520	41,415	1,490,520
2052	59	32,813	8,499	41,312	1,531,832 1,573,042
2053	60	32,732	8,478	41,210	
2054	61	32,651	8,456	41,107	1,614,149
2055	62	32,571	8,436	41,007	1,655,156 1,696,061
2056	63 64	32,490	8,415	40,905	
2057	64 65	32,410 32,330	8,394 8,373	40,804 40,703	1,736,865 1,777,568
2058 2059		32,330	8,352	40,703	1,818,170
2059	66 67	32,250	8,352	40,602	1,858,672
2060	68	32,170	8,311	40,302	1,899,074
2061	69	32,091	8,291	40,303	1,939,377
2062	70	31,933	8,291	40,203	1,979,580
2063	71	31,854	8,250	40,104	2,019,684
	, _	31,031	0,200	/	-,,

PRESENT VALUE OF FUTURE WAGE AND BENEFIT LOSS - SCENARIO 1 2015 - 2075

			EMPLOYEE		
YEAR	AGE	WAGES	BENEFITS	TOTAL	CUMULATE
****	***	******	*****	******	******
2065	72	31,775	8,230	40,005	2,059,689
2066	73	31,696	8,209	39,905	2,099,594
2067	74	31,618	8,189	39,807	2,139,401
2068	75	31,540	8,169	39,709	2,179,110
2069	76	31,463	8,149	39,612	2,218,722
2070	77	31,385	8,128	39,513	2,258,235
2071	78	31,308	8,109	39,417	2,297,652
2072	79	31,231	8,089	39,320	2,336,972
2073	80	31,153	8,069	39,222	2,376,194
2074	81	31,076	8,049	39,125	2,415,319
2075	82	27,556	7,137	34,693	\$2,450,012
"SARAI	H"	\$1,945,997	\$504,015	\$2,450,012	

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 26 of 77 $_{\mathtt{Table}}$ 7

PRESENT VALUE OF NET WAGE AND BENEFIT LOSS - SCENARIO 1 2012 - 2075

			EMPLOYEE		
YEAR	AGE	WAGES	BENEFITS	TOTAL	CUMULATE
****	***	*****	*****	******	******
2012	19	\$11,186	\$2,897	\$14,083	\$14,083
2013	20	23,151	5,996	29,147	43,230
2014	21	24,024	6,222	30,246	73,476
2015	22	24,621	6,377	30,998	104,474
2016	23	25,234	6,536	31,770	136,244
2017	24	25,862	6,699	32,561	168,805
2018	25	26,506	6,865	33,371	202,176
2019	26	27,165	7,036	34,201	236,377
2020	27	27,840	7,211	35,051	271,428
2021	28	28,534	7,391	35,925	307,353
2022	29	29,244	7,574	36,818	344,171
2023	30	29,971	7,763	37,734	381,905
2024	31	30,716	7,956	38,672	420,577
2025	32	31,481	8,153	39,634	460,211
2026	33	32,264	8,357	40,621	500,832
2027	34	33,066	8,564	41,630	542,462
2028	35	33,889	8,777	42,666	585,128
2029	36	34,731	8,995	43,726	628,854
2030	37	34,645	8,973	43,618	672,472
2031	38	34,560	8,951	43,511	715,983
2032	39	34,474	8,929	43,403	759,386
2033	40	34,389	8,907	43,296	802,682
2034	41	34,304	8,885	43,189	845,871
2035	42	34,220	8,863	43,083	888,954
2036	43	34,135	8,841	42,976	931,930
2037	44	34,051	8,819	42,870	974,800
2038	45	33,967	8,797	42,764	1,017,564
2039	46	33,883	8,776	42,659	1,060,223
2040	47	33,799	8,754	42,553	1,102,776
2041	48	33,716	8,732	42,448	1,145,224
2042	49	33,633	8,711	42,344	1,187,568
2043	50	33,550	8,689	42,239	1,229,807
2044	51	33,467	8,668	42,135	1,271,942
2045	52	33,384	8,646	42,030	1,313,972
2046	53	33,302	8,626	41,928	1,355,900
2047	54	33,220	8,604	41,824	1,397,724
2048	55	33,138	8,583	41,721	1,439,445
2049	56	33,057	8,562	41,619	1,481,064
2050	57	32,976	8,541	41,517	1,522,581
2051	58	32,895	8,520	41,415	1,563,996
2052	59	32,813	8,499	41,312	1,605,308
2053	60	32,732	8,478	41,210	1,646,518
2054	61	32,651	8,456	41,107	1,687,625
2055	62	32,571	8,436	41,007	1,728,632
2056	63	32,490	8,415	40,905	1,769,537
2057	64	32,410	8,394	40,804	1,810,341
2058	65	32,330	8,373	40,703	1,851,044
2059	66	32,250	8,352	40,602	1,891,646
2060	67	32,170	8,332	40,502	1,932,148
2061	68	32,091	8,311	40,402	1,972,550

PRESENT VALUE OF NET WAGE AND BENEFIT LOSS - SCENARIO 1 2012 - 2075

			EMPLOYEE		
YEAR	AGE	WAGES	BENEFITS	TOTAL	CUMULATE
***	***	******	*****	*****	*****
2062	69	32,012	8,291	40,303	2,012,853
2063	70	31,933	8,270	40,203	2,053,056
2064	71	31,854	8,250	40,104	2,093,160
2065	72	31,775	8,230	40,005	2,133,165
2066	73	31,696	8,209	39,905	2,173,070
2067	74	31,618	8,189	39,807	2,212,877
2068	75	31,540	8,169	39,709	2,252,586
2069	76	31,463	8,149	39,612	2,292,198
2070	77	31,385	8,128	39,513	2,331,711
2071	78	31,308	8,109	39,417	2,371,128
2072	79	31,231	8,089	39,320	2,410,448
2073	80	31,153	8,069	39,222	2,449,670
2074	81	31,076	8,049	39,125	2,488,795
2075	82	27,556	7,137	34,693	\$2,523,488
"SARA	ΔH "	\$2,004,358	\$519,130	\$2,523,488	

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 28 of 77 $_{\tt Table}$ 8

LOSS OF PAST WAGES - SCENARIO 2 2014

YEAR	AGE	WAGES	CUMULATE
****	***	*****	******
2014	21	\$15,010	\$15,010

"SARAH" \$15,010

Case 1:13-cr-01876-JB Document 193-3 9 Filed 05/19/17 Page 29 of 77

LOSS OF PAST EMPLOYEE BENEFITS - SCENARIO 2 2014

		EMPLOYEE	
YEAR	AGE	BENEFITS	CUMULATE
****	***	*****	*****
2014	21	\$3,888	\$3,888
"SARAH	ŢĦ	\$3.888	

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 30 of 77

Table 10

ECONOMIC LOSS TO DATE = SCENARIO 2 2014

			EMPLOYEE		
YEAR	AGE	WAGES	BENEFITS	TOTAL	CUMULATE
***	***	*****	*****	*****	*****
2014	21	\$15,010	\$3,888	\$18,898	\$18,898
"SARAH	I ''	\$15,010	\$3,888	\$18,898	

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 31 of 77 $_{\mathtt{Table}}$

PRESENT VALUE OF FUTURE WAGES - SCENARIO 2 2015 - 2075

			DISCOUNT	PRESENT	
YEAR	AGE	WAGES	FACTOR	VALUE	CUMULATE
****	***	******	******	*******	*******
2015	22	\$31,002	0.98765	\$30,619	\$30,619
2016	23	32,104	0.97546	31,316	61,935
2017	24	33,245	0.96342	32,029	93,964
2018	25	34,427	0.95152	32,758	126,722
2019	26	35,651	0.93978	33,504	160,226
2020	27	36,918	0.92817	34,266	194,492
2021	28	38,230	0.91672	35,046	229,538
2022	29	39,589	0.90540	35,844	265,382
2023	30	40,996	0.89422	36,659	302,041
2024	31	42,453	0.88318	37,494	339,535
2025	32	43,962	0.87228	38,347	377,882
2026	33	45,524	0.86151	39,219	417,101
2027	34	47,142	0.85087	40,112	457,213
2028	35	48,817	0.84037	41,024	498,237
2029	36	50,550	0.82999	41,956	540,193
2030	37	51,056	0.81975	41,853	582,046
2031	38	51,567	0.80963	41,750	623,796
2032	39	52,083	0.79963	41,647	665,443
2033	40	52,604	0.78976	41,545	706,988
2034	41	53,130	0.78001	41,442	748,430
2035	42	53,661	0.77038	41,339	789,769
2036	43	54,198	0.76087	41,238	831,007
2037	44	54,740	0.75147	41,135	872,142
2038	45	55,287	0.74220	41,034	913,176
2039	46	55,840	0.73303	40,932	954,108
2040	47	56,398	0.72398	40,831	994,939
2041	48	56,962	0.71505	40,731	1,035,670
2042	49	57,532	0.70622	40,630	1,076,300
2043	50	58,107	0.69750	40,530	1,116,830
2044	51	58,688	0.68889	40,430	1,157,260
2045	52	59,275	0.68038	40,330	1,197,590
2046	53	59,868	0.67198	40,230	1,237,820
2047	54	60,467	0.66369	40,131	1,277,951
2048	55	61,072	0.65549	40,032	1,317,983
2049	56	61,683	0.64740	39,934	1,357,917
2050	57	62,300	0.63941	39,835	1,397,752
2051	58	62,923	0.63152	39,737	1,437,489
2052	59	63,552	0.62372	39,639	1,477,128
2053	60	64,188	0.61602	39,541	1,516,669
2054	61	64,830	0.60841	39,443	1,556,112
2055	62	65,478	0.60090	39,346	1,595,458
2056	63	66,133	0.59348	39,249	1,634,707
2057	64	66,794	0.58616	39,152	1,673,859
2058	65	67,462	0.57892	39,055	1,712,914
2059	66	68,137	0.57177	38,959	1,751,873
2060	67	68,818	0.56471	38,862	1,790,735
2061	68	69,506	0.55774	38,766	1,829,501
2062	69 70	70,201	0.55086	38,671	1,868,172
2063	70	70,903	0.54406	38,575	1,906,747
2064	71	71,612	0.53734	38,480	1,945,227

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 32 of 77 $_{\tt Table\ 11\ (Cont.)}$

PRESENT VALUE OF FUTURE WAGES - SCENARIO 2 2015 - 2075

YEAR	AGE	WAGES	DISCOUNT FACTOR	PRESENT VALUE	CUMULATE
****	***	*****	******	*****	*****
2065	72	72,328	0.53071	38,385	1,983,612
2066	73	73,051	0.52415	38,290	2,021,902
2067	74	73,782	0.51768	38,195	2,060,097
2068	75	74,520	0.51129	38,101	2,098,198
2069	76	75,265	0.50498	38,007	2,136,205
2070	77	76,018	0.49874	37,913	2,174,118
2071	78	76,778	0.49259	37,820	2,211,938
2072	79	77,546	0.48651	37,727	2,249,665
2073	80	78,321	0.48050	37,633	2,287,298
2074	81	79,104	0.47457	37,540	2,324,838
2075	82	70,921	0.46936	33,287	\$2,358,125

\$2,358,125

"SARAH"

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 33 of 77 $_{\mathrm{Table}}^{\mathrm{12}}$

PRESENT VALUE OF FUTURE EMPLOYEE BENEFITS SCENARIO 2 2015 - 2075

		EMDI OVEE	DISCOUNT	DDECENT	
סמיםע	7 (7)	EMPLOYEE BENEFITS	DISCOUNT	PRESENT VALUE	CUMULATE
YEAR ****	AGE ***	******* DEMELITO	FACTOR ******	******	******
2015	22	\$8,030	0.98765	\$7,931	\$7,931
2016	23	8,315	0.97546	8,111	16,042
2017	24	8,610	0.96342	8,295	24,337
2018	25	8,917	0.95152	8,485	32,822
2019	26	9,234	0.93978	8,678	41,500
2020	27	9,562	0.92817	8,875	50,375
2021	28	9,902	0.91672	9,077	59,452
2022	29	10,254	0.90540	9,284	68,736
2023	30	10,618	0.89422	9,495	78,231
2024	31	10,995	0.88318	9,711	87,942
2025	32	11,386	0.87228	9,932	97,874
2026	33	11,791	0.86151	10,158	108,032
2027	34	12,210	0.85087	10,389	118,421
2028	35	12,644	0.84037	10,626	129,047
2029	36	13,092	0.82999	10,866	139,913
2030	37	13,224	0.81975	10,840	150,753
2031	38	13,356	0.80963	10,813	161,566
2032	39	13,489	0.79963	10,786	172,352
2033	40	13,624	0.78976	10,760	183,112
2034	41	13,761	0.78001	10,734	193,846
2035	42	13,898	0.77038	10,707	204,553
2036	43	14,037	0.76087	10,680	215,233
2037	44	14,178	0.75147	10,654	225,887
2038	45	14,319	0.74220	10,628	236,515
2039	46	14,463	0.73303	10,602	247,117
2040	47	14,607	0.72398	10,575	257,692
2041	48	14,753	0.71505	10,549	268,241
2042	49	14,901	0.70622	10,523	278,764
2043	50	15,050	0.69750	10,497	289,261
2044	51	15,200	0.68889	10,471	299,732
2045	52	15,352	0.68038	10,445	310,177
2046	53	15,506	0.67198	10,420	320,597
2047	54	15,661	0.66369	10,394	330,991
2048	55	15,818	0.65549	10,369	341,360
2049	56	15,976	0.64740	10,343	351,703
2050	57	16,136	0.63941	10,318	362,021
2051	58	16,297	0.63152	10,292	372,313
2052	59	16,460	0.62372	10,266	382,579
2053	60	16,625	0.61602	10,241	392,820
2054	61	16,791	0.60841	10,216	403,036
2055	62	16,959	0.60090	10,191	413,227
2056	63	17,128	0.59348	10,165	423,392
2057	64	17,300	0.58616	10,141	433,533
2058	65	17,473	0.57892	10,115	443,648
2059	66	17,647	0.57177	10,090	453,738
2060	67	17,824	0.56471	10,065	463,803
2061	68	18,002	0.55774	10,040	473,843
2062	69	18,182	0.55086	10,016	483,859
2063	70	18,364	0.54406	9,991	493,850
2064	71	18,548	0.53734	9,967	503,817

PRESENT VALUE OF FUTURE EMPLOYEE BENEFITS - SCENARIO 2 2015 - 2075

		EMPLOYEE	DISCOUNT	PRESENT	
YEAR	AGE	BENEFITS	FACTOR	VALUE	CUMULATE
****	***	*****	******	*****	*****
2065	72	18,733	0.53071	9,942	513,759
2066	73	18,920	0.52415	9,917	523,676
2067	74	19,110	0.51768	9,893	533,569
2068	75	19,301	0.51129	9,868	543,437
2069	76	19,494	0.50498	9,844	553,281
2070	77	19,689	0.49874	9,820	563,101
2071	78	19,886	0.49259	9,796	572,897
2072	79	20,084	0.48651	-9,771	582,668
2073	80	20,285	0.48050	9,747	592,415
2074	81	20,488	0.47457	9,723	602,138
2075	82	18,369	0.46936	8,622	\$610,760

"SARAH"

\$610,760

PRESENT VALUE OF FUTURE WAGE AND BENEFIT LOSS - SCENARIO 2 2015 - 2075

			EMPLOYEE		
YEAR	AGE	WAGES	BENEFITS	TOTAL	CUMULATE
****	***	*****	*****	*****	******
2015	22	\$30,619	\$7,931	\$38,550	\$38,550
2016	23	31,316	8,111	39,427	77,977
2017	24	32,029	8,295	40,324	118,301
2018	25	32,758	8,485	41,243	159,544
2019	26	33,504	8,678	42,182	201,726
2020	27	34,266	8,875	43,141	244,867
2021	28	35,046	9,077	44,123	288,990
2022	29	35,844	9,284	45,128	334,118
2023	30	36,659	9,495	46,154	380,272
2024	31	37,494	9,711	47,205	427,477
2025	32	38,347	9,932	48,279	475,756
2026	33	39,219	10,158	49,377	525,133
2027	34	40,112	10,389	50,501	575,634
2028	35	41,024	10,626	51,650	627,284
2029	36	41,956	10,866	52,822	680,106
2030	37	41,853	10,840	52,693	732,799
2031	38	41,750	10,813	52,563	785,362
2032	39	41,647	10,786	52,433	837,795
2033	40	41,545	10,760	52,305	890,100
2034	41	41,442	10,734	52,176	942,276
2035	42	41,339	10,707	52,046	994,322
2036	43	41,238	10,680	51,918	1,046,240
2037	44	41,135	10,654	51,789	1,098,029
2038	45	41,034	10,628	51,662	1,149,691
2039	46	40,932	10,602	51,534	1,201,225
2040	47	40,831	10,575	51,406	1,252,631
2041	48	40,731	10,549	51,280	1,303,911
2042	49	40,630	10,523	51,153	1,355,064
2043	50	40,530	10,497	51,027	1,406,091
2044	51	40,430	10,471	50,901	1,456,992
2045	52	40,330	10,445	50,775	1,507,767
2046	53	40,230	10,420	50,650	1,558,417
2047	54	40,131	10,394	50,525	1,608,942
2048	55	40,032	10,369	50,401	1,659,343
2049	56	39,934	10,343	50,277	1,709,620
2050	57	39,835	10,318	50,153	1,759,773
2051	58	39,737	10,292	50,029	1,809,802
2052	59	39,639	10,266	49,905	1,859,707
2053	60	39,541	10,241	49,782	1,909,489
2054	61	39,443	10,216	49,659	1,959,148
2055	62	39,346	10,191	49,537	2,008,685
2056	63	39,249	10,165	49,414	2,058,099
2057	64	39,152	10,141	49,293	2,107,392
2058	65	39,055	10,115	49,170	2,156,562
2059	66	38,959	10,090	49,049	2,205,611
2060	67	38,862	10,065	48,927	2,254,538
2061	68	38,766	10,040	48,806	2,303,344
2062	69	38,671	10,016	48,687	2,352,031
2063	70	38,575	9,991	48,566	2,400,597
2064	71	38,480	9,967	48,447	2,449,044

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 36 of 77 $_{\tt Table\ 13\ (Cont.)}$

PRESENT VALUE OF FUTURE WAGE AND BENEFIT LOSS - SCENARIO 2 2015 - 2075

			EMPLOYEE		
YEAR	AGE	WAGES	BENEFITS	TOTAL	CUMULATE
***	***	*****	*****	******	******
2065	72	38,385	9,942	48,327	2,497,371
2066	73	38,290	9,917	48,207	2,545,578
2067	74	38,195	9,893	48,088	2,593,666
2068	75	38,101	9,868	47,969	2,641,635
2069	76	38,007	9,844	47,851	2,689,486
2070	77	37,913	9,820	47,733	2,737,219
2071	78	37,820	9,796	47,616	2,784,835
2072	79	37,727	9,771	47,498	2,832,333
2073	80	37,633	9,747	47,380	2,879,713
2074	81	37,540	9,723	47,263	2,926,976
2075	82	33,287	8,622	41,909	\$2,968,885
"SARAI	Η"	\$2,358,125	\$610,760	\$2,968,885	

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 37 of 77 $_{\mathtt{Table}}$ 14

PRESENT VALUE OF NET WAGE AND BENEFIT LOSS - SCENARIO 2 2014 - 2075

			EMPLOYEE		
YEAR	AGE	WAGES	BENEFITS	TOTAL	CUMULATE
****	***	*****	*****	*****	*****
2014	21	\$15,010	\$3,888	\$18,898	\$18,898
2015	22	30,619	7,931	38,550	57,448
2016	23	31,316	8,111	39,427	96,875
2017	24	32,029	8,295	40,324	137,199
2018	25	32,758	8,485	41,243	178,442
2019	26	33,504	8,678	42,182	220,624
2020	27	34,266	8,875	43,141	263,765
2021	28	35,046	9,077	44,123	307,888
2022	29	35,844	9,284	45,128	353,016
2023	30	36,659	9,495	46,154	399,170
2024	31	37,494	9,711	47,205	446,375
2025	32	38,347	9,932	48,279	494,654
2026	33	39,219	10,158	49,377	544,031
2027	34	40,112	10,389	50,501	594,532
2028	35	41,024	10,626	51,650	646,182
2029	36	41,956	10,866	52,822	699,004
2030	37	41,853	10,840	52,693	751,697
2031	38	41,750	10,813	52,563	804,260
2032	39	41,647	10,786	52,433	856,693
2033	40	41,545	10,760	52,305	908,998
2034	41	41,442	10,734	52,176	961,174
2035	42	41,339	10,707	52,046	1,013,220
2036	43	41,238	10,680	51,918	1,065,138
2037	44	41,135	10,654	51,789	1,116,927
2038	45	41,034	10,628	51,662	1,168,589
2039	46	40,932	10,602	51,534	1,220,123
2040	47	40,831	10,575	51,406	1,271,529
2041	48	40,731	10,549	51,280	1,322,809
2042	49	40,630	10,523	51,153	1,373,962
2043	50	40,530	10,497	51,027	1,424,989
2044	51	40,430	10,471	50,901	1,475,890
2045	52	40,330	10,445	50,775	1,526,665
2046	53	40,230	10,420	50,650	1,577,315
2047	54	40,131	10,394	50,525	1,627,840
2048	55	40,032	10,369	50,401	1,678,241
2049	56	39,934	10,343	50,277	1,728,518
2050	57	39,835	10,318	50,153	1,778,671
2051	58	39,737	10,292	50,029	1,828,700
2052	59	39,639	10,266	49,905	1,878,605
2053	60	39,541	10,241	49,782	1,928,387
2054	61	39,443	10,216	49,659	1,978,046
2055	62	39,346	10,191	49,537	2,027,583
2056	63	39,249	10,165	49,414	2,076,997
2057	64	39,152	10,141	49,293	2,126,290
2058	65	39,055	10,115	49,170	2,175,460
2059	66	38,959	10,090	49,049	2,224,509
2060	67	38,862	10,065	48,927	2,273,436
2061	68	38,766	10,040	48,806	2,322,242
2062	69	38,671	10,016	48,687	2,370,929
2063	70	38,575	9,991	48,566	2,419,495

PRESENT VALUE OF NET WAGE AND BENEFIT LOSS - SCENARIO 2 2014 - 2075

			EMPLOYEE		
YEAR	AGE	WAGES	BENEFITS	TOTAL	CUMULATE
***	***	******	*****	******	******
2064	71	38,480	9,967	48,447	2,467,942
2065	72	38,385	9,942	48,327	2,516,269
2066	73	38,290	9,917	48,207	2,564,476
2067	74	38,195	9,893	48,088	2,612,564
2068	75	38,101	9,868	47,969	2,660,533
2069	76	38,007	9,844	47,851	2,708,384
2070	77	37,913	9,820	47,733	2,756,117
2071	7.8	37,820	9,796	47,616	2,803,733
2072	79	37,727	9,771	47,498	2,851,231
2073	80	37,633	9,747	47,380	2,898,611
2074	81	37,540	9,723	47,263	2,945,874
2075	82	33,287	8,622	41,909	\$2,987,783
"SARAF	Ι"	\$2,373,135	\$614,648	\$2,987,783	

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 39 of 77 $_{\mathtt{Table}}$ $_{\mathtt{15}}$

PRESENT VALUE OF FUTURE WAGES = SCENARIO 3 2016 - 2075

			DISCOUNT	PRESENT	
YEAR	AGE	WAGES	FACTOR	VALUE	CUMULATE
***	***	*****	*****	*****	******
2016	23	\$18,635	0.97546	\$18,178	\$18,178
2017	24	39,355	0.96342	37,915	56,093
2018	25	41,670	0.95152	39,650	95,743
2019	26	44,121	0.93978	41,464	137,207
2020	27	46,717	0.92817	43,361	180,568
2021	28	49,465	0.91672	45,346	225,914
2022	29	52,375	0.90540	47,420	273,334
2023	30	55,456	0.89422	49,590	322,924
2024	31	58,718	0.88318	51,859	374,783
2025	32	62,172	0.87228	54,231	429,014
2026	33	65,830	0.86151	56,713	485,727
2027	34	69,703	0.85087	59,308	545,035
2028	35	73,804	0.84037	62,023	607,058
2029	36	78,149	0.82999	64,863	671,921
2030	37	78,930 -	0.81975	64,703	736,624
2031	38	79,719	0.80963	64,543	801,167
2032	39	80,516	0.79963	64,383	865,550
2033	40	81,321	0.78976	64,224	929,774
2034	41	82,134	0.78001	64,065	993,839
2035	42	82,955	0.77038	63,907	1,057,746
2036	43	83,785	0.76087	63,749	1,121,495
2037	44	84,623	0.75147	63,592	1,185,087
2038	45	85,469	0.74220	63,435	1,248,522
2039	46	86,324	0.73303	63,278	1,311,800
2040	47	87,187	0.72398	63,122	1,374,922
2041	48	88,059	0.71505	62,967	1,437,889
2042	49	88,940	0.70622	62,811	1,500,700
2043	50	89,829	0.69750	62,656	1,563,356
2044	51	90,727	0.68889	62,501	1,625,857
2045	52	91,634	0.68038	62,346	1,688,203
2046	53	92,550	0.67198	62,192	1,750,395
2047	54	93,476	0.66369	62,039	1,812,434
2048	55	94,411	0.65549	61,885	1,874,319
2049	56	95,355	0.64740	61,733	1,936,052
2050	57	96,309	0.63941	61,581	1,997,633
2051	58	97,272	0.63152	61,429	2,059,062
2052	59	98,245	0.62372	61,277	2,120,339
2053	60	99,227	0.61602	61,126	2,181,465
2054	61	100,219	0.60841	60,974	2,242,439
2055	62	101,221	0.60090	60,824	2,303,263
2056	63	102,233	0.59348	60,673	2,363,936
2057	64	103,255	0.58616	60,524	2,424,460
2058	65	104,288	0.57892	60,374	2,484,834
2059	66	105,331	0.57177	60,225	2,545,059
2060	67	106,384	0.56471	60,076	2,605,135
2061	68	107,448	0.55774	59,928	2,665,063
2062	69	108,522	0.55086	59,780	2,724,843
2063	70	109,607	0.54406	59,633	2,784,476
2064	71	110,703	0.53734	59,485	2,843,961
2065	72	111,810	0.53071	59,339	2,903,300

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 40 of 77 $_{\tt Table\ 15\ (Cont.)}$

PRESENT VALUE OF FUTURE WAGES - SCENARIO 3 2016 - 2075

	DISCOUNT	PRESENT	
YEAR AGE WAGES	FACTOR	VALUE	CUMULATE
**** *** *****	*****	******	******
2066 73 112,928	0.52415	59,191	2,962,491
2067 74 114,057	0.51768	59,045	3,021,536
2068 75 115,198	0.51129	58,900	3,080,436
2069 76 116,350	0.50498	58,754	3,139,190
2070 77 117,514	0.49874	58,609	3,197,799
2071 78 118,689	0.49259	58,465	3,256,264
2072 79 119,876	0.48651	58,321	3,314,585
2073 80 121,075	0.48050	58,177	3,372,762
2074 81 122,286	0.47457	58,033	3,430,795
2075 82 109,635	0.46936	51,458	\$3,482,253

"SARAH"

\$3,482,253

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 41 of 77 Table 16

PRESENT VALUE OF FUTURE EMPLOYEE BENEFITS - SCENARIO 3 2016 - 2075

YEAR AGE BENEFITS FACTOR VALUE CUMULATE **** *** ******** ******** ******** ****				DIGGOIRE	DD 2 4 2 1 2 2	
**** *** ******* ******* ******* ******	37070	n an	EMPLOYEE	DISCOUNT	PRESENT	G
2016 23						
2017 24 10,193 0.96342 9,820 14,528 2018 25 10,793 0.95152 10,270 24,798 2019 26 11,427 0.93978 10,739 35,537 2020 27 12,100 0.92817 11,231 46,768 2021 28 12,811 0.91672 11,744 58,512 2022 29 13,565 0.90540 12,282 70,794 2023 30 14,363 0.89422 12,844 83,638 2024 31 15,208 0.88118 13,431 97,069 2025 32 16,103 0.87228 14,046 111,115 2026 33 17,050 0.86151 14,689 125,804 2027 34 18,053 0.85087 15,361 141,165 2028 35 19,115 0.84037 16,064 157,229 2030 37 20,441 0.81999 16,800 174,029 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
2018 25 10,793 0.95152 10,270 24,798 2019 26 11,427 0.93978 10,739 35,537 2020 27 12,100 0.92817 11,231 46,768 2021 28 12,811 0.91672 11,744 58,512 2022 29 13,565 0.90540 12,282 70,794 2023 30 14,363 0.89422 12,844 83,638 2024 31 15,208 0.88131 13,431 97,069 2025 32 16,103 0.87228 14,046 111,115 2026 33 17,050 0.86151 14,689 125,804 2027 34 18,053 0.85087 15,361 141,165 2028 35 19,115 0.84037 16,064 157,229 2029 36 20,241 0.82999 16,800 174,029 2030 37 20,443 0.81975 16,758 190,787						
2019 26 11,427 0.93978 10,739 35,537 2020 27 12,100 0.92817 11,231 46,768 2021 28 12,811 0.91672 11,744 58,512 2022 29 13,565 0.90540 12,282 70,794 2023 30 14,363 0.89422 12,844 83,638 2024 31 15,208 0.88318 13,431 97,069 2025 32 16,103 0.87228 14,046 111,115 2026 33 17,050 0.86151 14,689 125,804 2027 34 18,053 0.85087 15,361 141,165 2028 35 19,115 0.84037 16,064 157,229 2029 36 20,241 0.82999 16,800 174,029 2030 37 20,443 0.81975 16,589 19,787 2031 38 20,647 0.80963 16,716 207,503						
2020 27 12,100 0.92817 11,231 46,768 2021 28 12,811 0.91672 11,744 58,512 2022 29 13,565 0.90540 12,282 70,794 2023 30 14,363 0.89422 12,844 83,638 2024 31 15,208 0.88318 13,431 97,069 2025 32 16,103 0.87228 14,046 111,115 2026 33 17,050 0.86151 14,669 125,804 2027 34 18,053 0.85087 15,361 141,165 2028 35 19,115 0.84037 16,064 157,229 2029 36 20,241 0.82999 16,800 174,029 2031 38 20,647 0.80963 16,716 207,503 2031 38 20,647 0.80963 16,675 224,178 2033 40 21,062 0.78976 16,634 240,8						
2021 28 12,811 0.91672 11,744 58,512 2022 29 13,565 0.90540 12,282 70,794 2023 30 14,363 0.89422 12,844 83,638 2024 31 15,208 0.88318 13,431 97,069 2025 32 16,103 0.87228 14,046 111,115 2026 33 17,050 0.86151 14,689 125,804 2027 34 18,053 0.85087 15,361 141,165 2028 35 19,115 0.84037 16,064 157,229 2029 36 20,241 0.82999 16,800 174,029 2030 37 20,443 0.81975 16,675 224,178 2031 38 20,647 0.80963 16,716 207,503 2032 39 20,884 0.79963 16,675 224,178 2033 40 21,062 0.78976 16,634 240,						35,537
2022 29 13,565 0.90540 12,282 70,794 2023 30 14,363 0.89422 12,844 83,638 2024 31 15,208 0.88318 13,431 97,069 2025 32 16,103 0.87228 14,046 111,115 2026 33 17,050 0.86151 14,689 125,804 2027 34 18,053 0.85087 15,361 141,165 2028 35 19,115 0.84037 16,064 157,229 2030 37 20,441 0.82999 16,800 174,029 2031 38 20,647 0.80963 16,716 207,878 2031 38 20,647 0.80963 16,675 224,178 2033 40 21,062 0.78976 16,634 240,812 2034 41 21,273 0.78001 16,593 257,405 2035 42 21,485 0.77038 16,593 257				0.92817	11,231	46,768
2023 30 14,363 0.89422 12,844 83,638 2024 31 15,208 0.88318 13,431 97,069 2025 32 16,103 0.87228 14,046 111,115 2026 33 17,050 0.86151 14,689 125,804 2027 34 18,053 0.85087 15,361 141,165 2028 35 19,115 0.84037 16,064 157,229 2029 36 20,241 0.82999 16,800 174,029 2030 37 20,443 0.81975 16,758 190,787 2031 38 20,647 0.80963 16,675 224,178 2031 38 20,647 0.80963 16,675 224,178 2033 40 21,062 0.78976 16,634 240,812 2034 41 21,273 0.78001 16,593 257,405 2035 42 21,485 0.77038 16,511 29				0.91672	·	58,512
2024 31 15,208 0.88318 13,431 97,069 2025 32 16,103 0.87228 14,046 111,115 2026 33 17,050 0.86151 14,689 125,804 2027 34 18,053 0.85087 15,361 141,165 2028 35 19,115 0.84037 16,064 157,229 2029 36 20,241 0.82999 16,800 174,029 2030 37 20,443 0.81975 16,758 190,787 2031 38 20,647 0.80963 16,675 224,178 2033 40 21,062 0.78976 16,634 240,812 2034 41 21,273 0.78001 16,593 257,405 2035 42 21,485 0.77038 16,552 273,957 2036 43 21,700 0.76087 16,511 290,468 2037 44 21,917 0.75147 16,470 3		29		0.90540	12,282	70,794
2025 32 16,103 0.87228 14,046 111,115 2026 33 17,050 0.86151 14,689 125,804 2027 34 18,053 0.85087 15,361 141,165 2028 35 19,115 0.84037 16,064 157,229 2029 36 20,241 0.82999 16,800 174,029 2030 37 20,443 0.81975 16,758 190,787 2031 38 20,647 0.80963 16,716 207,503 2033 40 21,062 0.78976 16,634 240,782 2034 41 21,273 0.78001 16,593 257,405 2035 42 21,485 0.77038 16,552 273,957 2036 43 21,700 0.76087 16,511 290,468 2037 44 21,917 0.75147 16,470 306,938 2038 45 22,136 0.74220 16,429	2023	30	·		12,844	83,638
2026 33 17,050 0.86151 14,689 125,804 2027 34 18,053 0.85087 15,361 141,165 2028 35 19,115 0.84037 16,064 157,229 2029 36 20,241 0.82999 16,800 174,029 2030 37 20,443 0.81975 16,758 190,787 2031 38 20,647 0.80963 16,716 207,503 2032 39 20,854 0.79963 16,675 224,178 2033 40 21,062 0.78976 16,634 240,812 2035 42 21,485 0.77038 16,552 273,957 2036 43 21,700 0.76087 16,4511 290,468 2037 44 21,917 0.75147 16,470 306,938 2038 45 22,136 0.74220 16,429 323,367 2040 47 22,581 0.72398 16,348 <td< td=""><td>2024</td><td>31</td><td>·</td><td>0.88318</td><td>13,431</td><td>97,069</td></td<>	2024	31	·	0.88318	13,431	97,069
2027 34 18,053 0.85087 15,361 141,165 2028 35 19,115 0.84037 16,064 157,229 2029 36 20,241 0.82999 16,800 174,029 2031 38 20,647 0.80963 16,716 207,503 2032 39 20,854 0.79963 16,675 224,178 2033 40 21,062 0.78976 16,634 240,812 2034 41 21,273 0.78001 16,593 257,405 2035 42 21,485 0.77038 16,552 273,957 2036 43 21,700 0.76087 16,511 290,468 2037 44 21,917 0.75147 16,429 323,367 2038 45 22,136 0.74220 16,429 323,367 2040 47 22,581 0.72398 16,389 339,756 2041 48 22,807 0.71505 16,388	2025	32	16,103	0.87228	14,046	111,115
2028 35 19,115 0.84037 16,064 157,229 2029 36 20,241 0.82999 16,800 174,029 2030 37 20,443 0.81975 16,758 190,787 2031 38 20,647 0.80963 16,716 207,503 2032 39 20,854 0.79963 16,675 224,178 2033 40 21,062 0.78976 16,634 240,812 2034 41 21,273 0.78001 16,552 273,957 2036 43 21,700 0.76087 16,511 290,468 2037 44 21,917 0.75147 16,470 306,938 2038 45 22,136 0.74220 16,429 323,367 2039 46 22,358 0.73303 16,389 339,756 2040 47 22,581 0.72398 16,348 356,104 2041 48 22,807 0.71505 16,308	2026	33	17,050	0.86151	14,689	125,804
2029 36 20,241 0.82999 16,800 174,029 2030 37 20,443 0.81975 16,758 190,787 2031 38 20,647 0.80963 16,716 207,503 2032 39 20,854 0.79963 16,675 224,178 2034 41 21,062 0.78976 16,634 240,812 2034 41 21,273 0.78001 16,593 257,405 2035 42 21,485 0.77038 16,552 273,957 2036 43 21,700 0.76087 16,511 290,468 2037 44 21,917 0.75147 16,470 306,938 2038 45 22,136 0.74220 16,429 323,367 2039 46 22,581 0.72398 16,348 356,104 2041 48 22,807 0.71505 16,308 372,412 2042 49 23,035 0.70622 16,268	2027	34	18,053	0.85087	15,361	
2030 37 20,443 0.81975 16,758 190,787 2031 38 20,647 0.80963 16,716 207,503 2032 39 20,854 0.79963 16,675 224,178 2033 40 21,062 0.78976 16,634 240,812 2035 42 21,485 0.77038 16,552 273,957 2036 43 21,700 0.76087 16,511 290,468 2037 44 21,917 0.75147 16,470 306,938 2038 45 22,136 0.74220 16,429 323,367 2039 46 22,358 0.73303 16,389 339,756 2040 47 22,581 0.72398 16,348 356,104 2041 48 22,807 0.71505 16,308 372,412 2042 49 23,035 0.70622 16,268 388,680 2043 50 23,498 0.68889 16,184	2028	35	·	0.84037	16,064	157,229
2031 38 20,647 0.80963 16,716 207,503 2032 39 20,854 0.79963 16,675 224,178 2033 40 21,062 0.78976 16,634 240,812 2034 41 21,273 0.78001 16,593 257,405 2035 42 21,485 0.77038 16,551 290,468 2037 44 21,917 0.75147 16,470 306,938 2038 45 22,136 0.74220 16,429 323,367 2039 46 22,358 0.73303 16,389 339,756 2040 47 22,581 0.72398 16,348 356,104 2041 48 22,807 0.71505 16,308 372,412 2042 49 23,035 0.70622 16,268 388,680 2043 50 23,266 0.69750 16,228 404,908 2044 51 23,498 0.68389 16,188	2029	36	20,241	0.82999	16,800	174,029
2032 39 20,854 0.79963 16,675 224,178 2033 40 21,062 0.78976 16,634 240,812 2034 41 21,273 0.78001 16,593 257,405 2035 42 21,485 0.77038 16,552 273,957 2036 43 21,700 0.76087 16,511 290,468 2037 44 21,917 0.75147 16,470 306,938 2038 45 22,136 0.74220 16,429 323,367 2039 46 22,358 0.73303 16,389 339,756 2040 47 22,581 0.72398 16,348 356,104 2041 48 22,807 0.71505 16,308 372,412 2042 49 23,035 0.70622 16,268 388,680 2043 50 23,266 0.69750 16,228 404,908 2044 51 23,498 0.68889 16,184	2030	37	20,443	0.81975	16,758	190,787
2033 40 21,062 0.78976 16,634 240,812 2034 41 21,273 0.78001 16,593 257,405 2035 42 21,485 0.77038 16,552 273,957 2036 43 21,700 0.76087 16,511 290,468 2037 44 21,917 0.75147 16,470 306,938 2038 45 22,136 0.74220 16,429 323,367 2039 46 22,581 0.73303 16,389 339,756 2040 47 22,581 0.72398 16,348 356,104 2041 48 22,807 0.71505 16,308 372,412 2042 49 23,035 0.70622 16,268 388,680 2043 50 23,266 0.69750 16,228 404,908 2044 51 23,498 0.68389 16,147 437,243 2046 53 23,970 0.67198 16,064	2031	38	•	0.80963	16,716	207,503
2034 41 21,273 0.78001 16,593 257,405 2035 42 21,485 0.77038 16,552 273,957 2036 43 21,700 0.76087 16,511 290,468 2037 44 21,917 0.75147 16,470 306,938 2038 45 22,136 0.74220 16,429 323,367 2039 46 22,358 0.73303 16,389 339,756 2040 47 22,581 0.72398 16,348 356,104 2041 48 22,807 0.71505 16,308 372,412 2042 49 23,035 0.70622 16,268 388,680 2043 50 23,266 0.69750 16,228 404,908 2044 51 23,498 0.68889 16,188 421,096 2045 52 23,733 0.68038 16,107 453,350 2047 54 24,210 0.66369 16,068	2032	39	20,854	0.79963	16,675	224,178
2035 42 21,485 0.77038 16,552 273,957 2036 43 21,700 0.76087 16,511 290,468 2037 44 21,917 0.75147 16,470 306,938 2038 45 22,136 0.74220 16,429 323,367 2039 46 22,358 0.73303 16,389 339,756 2040 47 22,581 0.72398 16,348 356,104 2041 48 22,807 0.71505 16,308 372,412 2042 49 23,035 0.70622 16,268 388,680 2043 50 23,266 0.69750 16,228 404,908 2044 51 23,498 0.68889 16,188 421,096 2045 52 23,733 0.68038 16,147 437,243 2046 53 23,970 0.67198 16,068 469,418 2047 54 24,210 0.65549 16,068	2033	40	21,062	0.78976	16,634	240,812
2036 43 21,700 0.76087 16,511 290,468 2037 44 21,917 0.75147 16,470 306,938 2038 45 22,136 0.74220 16,429 323,367 2039 46 22,358 0.73303 16,389 339,756 2040 47 22,581 0.72398 16,348 356,104 2041 48 22,807 0.71505 16,308 372,412 2042 49 23,035 0.70622 16,268 388,680 2043 50 23,266 0.69750 16,228 404,908 2044 51 23,498 0.68889 16,188 421,096 2045 52 23,733 0.68038 16,107 453,350 2045 52 23,733 0.68038 16,107 453,350 2046 53 23,970 0.67198 16,007 453,350 2047 54 24,210 0.63699 16,028	2034	41	21,273	0.78001	16,593	257,405
2037 44 21,917 0.75147 16,470 306,938 2038 45 22,136 0.74220 16,429 323,367 2039 46 22,358 0.73303 16,389 339,756 2040 47 22,581 0.72398 16,348 356,104 2041 48 22,807 0.71505 16,308 372,412 2042 49 23,035 0.70622 16,268 388,680 2043 50 23,266 0.69750 16,228 404,908 2044 51 23,498 0.68889 16,188 421,096 2045 52 23,733 0.68038 16,107 453,350 2045 52 23,733 0.66369 16,068 469,418 2045 53 23,970 0.67198 16,107 453,350 2047 54 24,210 0.66369 16,068 469,418 2048 55 24,452 0.65549 16,028	2035	42	21,485	0.77038	16,552	273,957
2038 45 22,136 0.74220 16,429 323,367 2039 46 22,358 0.73303 16,389 339,756 2040 47 22,581 0.72398 16,348 356,104 2041 48 22,807 0.71505 16,308 372,412 2042 49 23,035 0.70622 16,268 388,680 2043 50 23,266 0.69750 16,228 404,908 2044 51 23,498 0.68889 16,188 421,096 2045 52 23,733 0.68038 16,147 437,243 2046 53 23,970 0.67198 16,107 453,350 2047 54 24,210 0.66369 16,068 469,418 2048 55 24,452 0.65549 16,028 485,446 2049 56 24,697 0.64740 15,989 501,435 2051 58 25,193 0.63152 15,871	2036	43	21,700	0.76087	16,511	290,468
2039 46 22,358 0.73303 16,389 339,756 2040 47 22,581 0.72398 16,348 356,104 2041 48 22,807 0.71505 16,308 372,412 2042 49 23,035 0.70622 16,268 388,680 2043 50 23,266 0.69750 16,228 404,908 2044 51 23,498 0.68889 16,188 421,096 2045 52 23,733 0.68038 16,147 437,243 2046 53 23,970 0.67198 16,107 453,350 2047 54 24,210 0.66369 16,068 469,418 2048 55 24,452 0.65549 16,028 485,446 2049 56 24,697 0.64740 15,989 501,435 2050 57 24,944 0.63941 15,949 517,384 2051 58 25,193 0.63152 15,871 549,165 2053 60 25,750 0.60841 15,792 <td< td=""><td>2037</td><td>44</td><td>21,917</td><td>0.75147</td><td>16,470</td><td>306,938</td></td<>	2037	44	21,917	0.75147	16,470	306,938
2040 47 22,581 0.72398 16,348 356,104 2041 48 22,807 0.71505 16,308 372,412 2042 49 23,035 0.70622 16,268 388,680 2043 50 23,266 0.69750 16,228 404,908 2044 51 23,498 0.68889 16,188 421,096 2045 52 23,733 0.68038 16,147 437,243 2046 53 23,970 0.67198 16,107 453,350 2047 54 24,210 0.66369 16,068 469,418 2048 55 24,452 0.65549 16,028 485,446 2049 56 24,697 0.64740 15,989 501,435 2050 57 24,944 0.63941 15,949 517,384 2051 58 25,193 0.63152 15,871 549,165 2053 60 25,700 0.61602 15,832 564,997 2054 61 25,957 0.60841 15,792 <td< td=""><td>2038</td><td>45</td><td>22,136</td><td>0.74220</td><td>16,429</td><td>323,367</td></td<>	2038	45	22,136	0.74220	16,429	323,367
2041 48 22,807 0.71505 16,308 372,412 2042 49 23,035 0.70622 16,268 388,680 2043 50 23,266 0.69750 16,228 404,908 2044 51 23,498 0.68889 16,188 421,096 2045 52 23,733 0.68038 16,147 437,243 2046 53 23,970 0.67198 16,008 469,418 2047 54 24,210 0.66369 16,068 469,418 2048 55 24,452 0.65549 16,028 485,446 2049 56 24,697 0.64740 15,989 501,435 2050 57 24,944 0.63941 15,949 517,384 2051 58 25,193 0.63152 15,871 549,165 2053 60 25,700 0.61602 15,832 564,997 2054 61 25,957 0.60841 15,792 580,789 2055 62 26,216 0.60090 15,753 <td< td=""><td>2039</td><td>46</td><td>22,358</td><td>0.73303</td><td>16,389</td><td>339,756</td></td<>	2039	46	22,358	0.73303	16,389	339,756
2042 49 23,035 0.70622 16,268 388,680 2043 50 23,266 0.69750 16,228 404,908 2044 51 23,498 0.68889 16,188 421,096 2045 52 23,733 0.68038 16,147 437,243 2046 53 23,970 0.67198 16,107 453,350 2047 54 24,210 0.66369 16,068 469,418 2048 55 24,452 0.65549 16,028 485,446 2049 56 24,697 0.64740 15,989 501,435 2050 57 24,944 0.63941 15,949 517,384 2051 58 25,193 0.63152 15,871 549,165 2052 59 25,445 0.62372 15,871 549,165 2053 60 25,700 0.61602 15,832 564,997 2054 61 25,957 0.60841 15,792 580,789 2055 62 26,216 0.60090 15,753 <td< td=""><td>2040</td><td>47</td><td>22,581</td><td>0.72398</td><td>16,348</td><td>356,104</td></td<>	2040	47	22,581	0.72398	16,348	356,104
2043 50 23,266 0.69750 16,228 404,908 2044 51 23,498 0.68889 16,188 421,096 2045 52 23,733 0.68038 16,147 437,243 2046 53 23,970 0.67198 16,107 453,350 2047 54 24,210 0.66369 16,068 469,418 2048 55 24,452 0.65549 16,028 485,446 2049 56 24,697 0.64740 15,989 501,435 2050 57 24,944 0.63941 15,949 517,384 2051 58 25,193 0.63152 15,910 533,294 2052 59 25,445 0.62372 15,871 549,165 2053 60 25,700 0.61602 15,832 564,997 2054 61 25,957 0.60841 15,792 580,789 2055 62 26,216 0.60090 15,753 596,542 2056 63 26,478 0.58616 15,637 <td< td=""><td>2041</td><td>48</td><td>22,807</td><td>0.71505</td><td>16,308</td><td>372,412</td></td<>	2041	48	22,807	0.71505	16,308	372,412
2044 51 23,498 0.68889 16,188 421,096 2045 52 23,733 0.68038 16,147 437,243 2046 53 23,970 0.67198 16,107 453,350 2047 54 24,210 0.66369 16,068 469,418 2048 55 24,452 0.65549 16,028 485,446 2049 56 24,697 0.64740 15,989 501,435 2050 57 24,944 0.63941 15,949 517,384 2051 58 25,193 0.63152 15,910 533,294 2052 59 25,445 0.62372 15,871 549,165 2053 60 25,700 0.61602 15,832 564,997 2054 61 25,957 0.60841 15,792 580,789 2055 62 26,216 0.60090 15,753 596,542 2056 63 26,478 0.59348 15,714 612,256 2057 64 26,743 0.58616 15,637 <td< td=""><td>2042</td><td>49</td><td>23,035</td><td>0.70622</td><td>16,268</td><td>388,680</td></td<>	2042	49	23,035	0.70622	16,268	388,680
2045 52 23,733 0.68038 16,147 437,243 2046 53 23,970 0.67198 16,107 453,350 2047 54 24,210 0.66369 16,068 469,418 2048 55 24,452 0.65549 16,028 485,446 2049 56 24,697 0.64740 15,989 501,435 2050 57 24,944 0.63941 15,949 517,384 2051 58 25,193 0.63152 15,910 533,294 2052 59 25,445 0.62372 15,871 549,165 2053 60 25,700 0.61602 15,832 564,997 2054 61 25,957 0.60841 15,792 580,789 2055 62 26,216 0.60090 15,753 596,542 2056 63 26,478 0.59348 15,714 612,256 2057 64 26,743 0.58616 15,637	2043	50	23,266	0.69750	16,228	404,908
2046 53 23,970 0.67198 16,107 453,350 2047 54 24,210 0.66369 16,068 469,418 2048 55 24,452 0.65549 16,028 485,446 2049 56 24,697 0.64740 15,989 501,435 2050 57 24,944 0.63941 15,949 517,384 2051 58 25,193 0.63152 15,910 533,294 2052 59 25,445 0.62372 15,871 549,165 2053 60 25,700 0.61602 15,832 564,997 2054 61 25,957 0.60841 15,792 580,789 2055 62 26,216 0.60090 15,753 596,542 2056 63 26,478 0.59348 15,714 612,256 2057 64 26,743 0.58616 15,676 627,932 2058 65 27,011 0.57892 15,637 643,569 2059 66 27,281 0.57177 15,598 <td< td=""><td>2044</td><td>51</td><td>23,498</td><td>0.68889</td><td>16,188</td><td>421,096</td></td<>	2044	51	23,498	0.68889	16,188	421,096
2047 54 24,210 0.66369 16,068 469,418 2048 55 24,452 0.65549 16,028 485,446 2049 56 24,697 0.64740 15,989 501,435 2050 57 24,944 0.63941 15,949 517,384 2051 58 25,193 0.63152 15,910 533,294 2052 59 25,445 0.62372 15,871 549,165 2053 60 25,700 0.61602 15,832 564,997 2054 61 25,957 0.60841 15,792 580,789 2055 62 26,216 0.60090 15,753 596,542 2056 63 26,478 0.59348 15,714 612,256 2057 64 26,743 0.58616 15,676 627,932 2058 65 27,011 0.57892 15,637 643,569 2059 66 27,281 0.57177 15,598 659,167 2061 68 27,829 0.55774 15,483 <td< td=""><td>2045</td><td>52</td><td>23,733</td><td>0.68038</td><td>16,147</td><td>437,243</td></td<>	2045	52	23,733	0.68038	16,147	437,243
2048 55 24,452 0.65549 16,028 485,446 2049 56 24,697 0.64740 15,989 501,435 2050 57 24,944 0.63941 15,949 517,384 2051 58 25,193 0.63152 15,910 533,294 2052 59 25,445 0.62372 15,871 549,165 2053 60 25,700 0.61602 15,832 564,997 2054 61 25,957 0.60841 15,792 580,789 2055 62 26,216 0.60090 15,753 596,542 2056 63 26,478 0.59348 15,714 612,256 2057 64 26,743 0.58616 15,676 627,932 2058 65 27,011 0.57892 15,637 643,569 2059 66 27,281 0.57177 15,598 659,167 2060 67 27,553 0.56471 15,521 690,247 2062 69 28,107 0.55086 15,483 <td< td=""><td>2046</td><td>53</td><td>23,970</td><td>0.67198</td><td>16,107</td><td>453,350</td></td<>	2046	53	23,970	0.67198	16,107	453,350
2049 56 24,697 0.64740 15,989 501,435 2050 57 24,944 0.63941 15,949 517,384 2051 58 25,193 0.63152 15,910 533,294 2052 59 25,445 0.62372 15,871 549,165 2053 60 25,700 0.61602 15,832 564,997 2054 61 25,957 0.60841 15,792 580,789 2055 62 26,216 0.60090 15,753 596,542 2056 63 26,478 0.59348 15,714 612,256 2057 64 26,743 0.58616 15,676 627,932 2058 65 27,011 0.57892 15,637 643,569 2059 66 27,281 0.57177 15,598 659,167 2060 67 27,553 0.56471 15,559 674,726 2061 68 27,829 0.55774 15,521 690,247 2062 69 28,107 0.55086 15,483 <td< td=""><td>2047</td><td>54</td><td>24,210</td><td>0.66369</td><td>16,068</td><td>469,418</td></td<>	2047	54	24,210	0.66369	16,068	469,418
2050 57 24,944 0.63941 15,949 517,384 2051 58 25,193 0.63152 15,910 533,294 2052 59 25,445 0.62372 15,871 549,165 2053 60 25,700 0.61602 15,832 564,997 2054 61 25,957 0.60841 15,792 580,789 2055 62 26,216 0.60090 15,753 596,542 2056 63 26,478 0.59348 15,714 612,256 2057 64 26,743 0.58616 15,676 627,932 2058 65 27,011 0.57892 15,637 643,569 2059 66 27,281 0.57177 15,598 659,167 2060 67 27,553 0.56471 15,559 674,726 2061 68 27,829 0.55774 15,521 690,247 2062 69 28,107 0.55086 15,483 705,730 2063 70 28,388 0.54406 15,445 <td< td=""><td>2048</td><td>55</td><td>24,452</td><td>0.65549</td><td>16,028</td><td>485,446</td></td<>	2048	55	24,452	0.65549	16,028	485,446
2051 58 25,193 0.63152 15,910 533,294 2052 59 25,445 0.62372 15,871 549,165 2053 60 25,700 0.61602 15,832 564,997 2054 61 25,957 0.60841 15,792 580,789 2055 62 26,216 0.60090 15,753 596,542 2056 63 26,478 0.59348 15,714 612,256 2057 64 26,743 0.58616 15,676 627,932 2058 65 27,011 0.57892 15,637 643,569 2059 66 27,281 0.57177 15,598 659,167 2060 67 27,553 0.56471 15,559 674,726 2061 68 27,829 0.55774 15,521 690,247 2062 69 28,107 0.55086 15,483 705,730 2063 70 28,388 0.54406 15,445 721,175 2064 71 28,672 0.53734 15,407 <td< td=""><td>2049</td><td>56</td><td>24,697</td><td>0.64740</td><td>15,989</td><td>501,435</td></td<>	2049	56	24,697	0.64740	15,989	501,435
2052 59 25,445 0.62372 15,871 549,165 2053 60 25,700 0.61602 15,832 564,997 2054 61 25,957 0.60841 15,792 580,789 2055 62 26,216 0.60090 15,753 596,542 2056 63 26,478 0.59348 15,714 612,256 2057 64 26,743 0.58616 15,676 627,932 2058 65 27,011 0.57892 15,637 643,569 2059 66 27,281 0.57177 15,598 659,167 2060 67 27,553 0.56471 15,559 674,726 2061 68 27,829 0.55774 15,521 690,247 2062 69 28,107 0.55086 15,483 705,730 2063 70 28,388 0.54406 15,445 721,175 2064 71 28,672 0.53734 15,407 736,582	2050	57	24,944	0.63941	15,949	517,384
2053 60 25,700 0.61602 15,832 564,997 2054 61 25,957 0.60841 15,792 580,789 2055 62 26,216 0.60090 15,753 596,542 2056 63 26,478 0.59348 15,714 612,256 2057 64 26,743 0.58616 15,676 627,932 2058 65 27,011 0.57892 15,637 643,569 2059 66 27,281 0.57177 15,598 659,167 2060 67 27,553 0.56471 15,559 674,726 2061 68 27,829 0.55774 15,521 690,247 2062 69 28,107 0.55086 15,483 705,730 2063 70 28,388 0.54406 15,445 721,175 2064 71 28,672 0.53734 15,407 736,582	2051	58	25,193	0.63152	15,910	533,294
2054 61 25,957 0.60841 15,792 580,789 2055 62 26,216 0.60090 15,753 596,542 2056 63 26,478 0.59348 15,714 612,256 2057 64 26,743 0.58616 15,676 627,932 2058 65 27,011 0.57892 15,637 643,569 2059 66 27,281 0.57177 15,598 659,167 2060 67 27,553 0.56471 15,559 674,726 2061 68 27,829 0.55774 15,521 690,247 2062 69 28,107 0.55086 15,483 705,730 2063 70 28,388 0.54406 15,445 721,175 2064 71 28,672 0.53734 15,407 736,582	2052	59	25,445	0.62372	15,871	549,165
2055 62 26,216 0.60090 15,753 596,542 2056 63 26,478 0.59348 15,714 612,256 2057 64 26,743 0.58616 15,676 627,932 2058 65 27,011 0.57892 15,637 643,569 2059 66 27,281 0.57177 15,598 659,167 2060 67 27,553 0.56471 15,559 674,726 2061 68 27,829 0.55774 15,521 690,247 2062 69 28,107 0.55086 15,483 705,730 2063 70 28,388 0.54406 15,445 721,175 2064 71 28,672 0.53734 15,407 736,582	2053	60	25,700	0.61602	15,832	564,997
2056 63 26,478 0.59348 15,714 612,256 2057 64 26,743 0.58616 15,676 627,932 2058 65 27,011 0.57892 15,637 643,569 2059 66 27,281 0.57177 15,598 659,167 2060 67 27,553 0.56471 15,559 674,726 2061 68 27,829 0.55774 15,521 690,247 2062 69 28,107 0.55086 15,483 705,730 2063 70 28,388 0.54406 15,445 721,175 2064 71 28,672 0.53734 15,407 736,582	2054	61	25,957	0.60841	15,792	580,789
2057 64 26,743 0.58616 15,676 627,932 2058 65 27,011 0.57892 15,637 643,569 2059 66 27,281 0.57177 15,598 659,167 2060 67 27,553 0.56471 15,559 674,726 2061 68 27,829 0.55774 15,521 690,247 2062 69 28,107 0.55086 15,483 705,730 2063 70 28,388 0.54406 15,445 721,175 2064 71 28,672 0.53734 15,407 736,582	2055	62	26,216	0.60090	15,753	596,542
2058 65 27,011 0.57892 15,637 643,569 2059 66 27,281 0.57177 15,598 659,167 2060 67 27,553 0.56471 15,559 674,726 2061 68 27,829 0.55774 15,521 690,247 2062 69 28,107 0.55086 15,483 705,730 2063 70 28,388 0.54406 15,445 721,175 2064 71 28,672 0.53734 15,407 736,582	2056	63	26,478	0.59348	15,714	612,256
2059 66 27,281 0.57177 15,598 659,167 2060 67 27,553 0.56471 15,559 674,726 2061 68 27,829 0.55774 15,521 690,247 2062 69 28,107 0.55086 15,483 705,730 2063 70 28,388 0.54406 15,445 721,175 2064 71 28,672 0.53734 15,407 736,582	2057	64	26,743	0.58616	15,676	627,932
2060 67 27,553 0.56471 15,559 674,726 2061 68 27,829 0.55774 15,521 690,247 2062 69 28,107 0.55086 15,483 705,730 2063 70 28,388 0.54406 15,445 721,175 2064 71 28,672 0.53734 15,407 736,582	2058	65	27,011	0.57892	15,637	643,569
2061 68 27,829 0.55774 15,521 690,247 2062 69 28,107 0.55086 15,483 705,730 2063 70 28,388 0.54406 15,445 721,175 2064 71 28,672 0.53734 15,407 736,582	2059	66	27,281	0.57177	15,598	659,167
2061 68 27,829 0.55774 15,521 690,247 2062 69 28,107 0.55086 15,483 705,730 2063 70 28,388 0.54406 15,445 721,175 2064 71 28,672 0.53734 15,407 736,582	2060	67	27,553	0.56471	15,559	674,726
2062 69 28,107 0.55086 15,483 705,730 2063 70 28,388 0.54406 15,445 721,175 2064 71 28,672 0.53734 15,407 736,582	2061	68	27,829			
2063 70 28,388 0.54406 15,445 721,175 2064 71 28,672 0.53734 15,407 736,582	2062	69	28,107			
2064 71 28,672 0.53734 15,407 736,582	2063			0.54406		
				0.53734		
	2065	72		0.53071		

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 42 of 77 Table 16 (Cont.)

PRESENT VALUE OF FUTURE EMPLOYEE BENEFITS - SCENARIO 3 2016 - 2075

		EMPLOYEE	DISCOUNT	PRESENT	
YEAR	AGE	BENEFITS	FACTOR	VALUE	CUMULATE
****	***	*****	*****	*****	*****
2066	73	29,248	0.52415	15,330	767,281
2067	74	29,541	0.51768	15,293	782,574
2068	75	29,836	0.51129	15,255	797,829
2069	76	30,135	0.50498	15,218	813,047
2070	77	30,436	0.49874	15,180	828,227
2071	78	30,740	0.49259	15,142	843,369
2072	79	31,048	0.48651	15,105	858,474
2073	80	31,358	0.48050	15,068	873,542
2074	81	31,672	0.47457	15,031	888,573
2075	82	28,395	0.46936	13,327	\$901,900

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 43 of 77 $_{\mathtt{Table}}$ $_{\mathtt{17}}$

PRESENT VALUE OF FUTURE WAGE AND BENEFIT LOSS - SCENARIO 3 2016 - 2075

VE AD	7.00	MACHO	EMPLOYEE	EO E A	G********
YEAR ****	AGE ***	WAGES ******	BENEFITS *****	TOTAL	CUMULATE
				*******	*******
2016 2017	23	\$18,178	\$4,708	\$22,886	\$22,886
	24	37,915	9,820	47,735	70,621
2018 2019	25 26	39,650	10,270	49,920	120,541
2020	27	41,464	10,739	52,203	172,744
2021	28	43,361 45,346	11,231 11,744	54,592 57,090	227,336
2021	29	47,420	12,282	59,702	284,426
2023	30	49,590	12,844	62,434	344,128 406,562
2024	31	51,859	13,431	65,290	471,852
2025	32	54,231	14,046	68,277	540,129
2026	33	56,713	14,689	71,402	611,531
2027	34	59,308	15,361	74,669	686,200
2028	35	62,023	16,064	78,087	764,287
2029	36	64,863	16,800	81,663	845,950
2030	37	64,703	16,758	81,461	927,411
2031	38	64,543	16,716	81,259	1,008,670
2032	39	64,383	16,675	81,058	1,089,728
2033	40	64,224	16,634	80,858	1,170,586
2034	41	64,065	16,593	80,658	1,251,244
2035	42	63,907	16,552	80,459	1,331,703
2036	43	63,749	16,511	80,260	1,411,963
2037	44	63,592	16,470	80,062	1,492,025
2038	45	63,435	16,429	79,864	1,571,889
2039	46	63,278	16,389	79,667	1,651,556
2040	47	63,122	16,348	79,470	1,731,026
2041	48	62,967	16,308	79,275	1,810,301
2042	49	62,811	16,268	79,079	1,889,380
2043	50	62,656	16,228	78,884	1,968,264
2044	51	62,501	16,188	78,689	2,046,953
2045	52	62,346	16,147	78,493	2,125,446
2046	53	62,192	16,107	78,299	2,203,745
2047	54	62,039	16,068	78,107	2,281,852
2048	55	61,885	16,028	77,913	2,359,765
2049	56	61,733	15,989	77,722	2,437,487
2050	57	61,581	15,949	77,530	2,515,017
2051	58	61,429	15,910	77,339	2,592,356
2052	59	61,277	15,871	77,148	2,669,504
2053	60	61,126	15,832	76,958	2,746,462
2054	61	60,974	15,792	76,766	2,823,228
2055	62	60,824	15,753	76,577	2,899,805
2056	63	60,673	15,714	76,387	2,976,192
2057	64	60,524	15,676	76,200	3,052,392
2058	65	60,374	15,637	76,011	3,128,403
2059	66	60,225	15,598	75,823	3,204,226
2060	67	60,076	15,559	75,635	3,279,861
2061	68	59,928	15,521	75,449	3,355,310
2062	69	59,780	15,483	75,263	3,430,573
2063	70	59,633	15,445	75,078	3,505,651
2064	71	59,485	15,407	74,892	3,580,543
2065	72	59,339	15,369	74,708	3,655,251

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 44 of 77

PRESENT VALUE OF FUTURE WAGE AND BENEFIT LOSS = SCENARIO 3 2016 - 2075

			EMPLOYEE		
YEAR	AGE	WAGES	BENEFITS	TOTAL	CUMULATE
****	***	*****	******	******	******
2066	73	59,191	15,330	74,521	3,729,772
2067	74	59,045	15,293	74,338	3,804,110
2068	75	58,900	15,255	74,155	3,878,265
2069	76	58,754	15,218	73,972	3,952,237
2070	77	58,609	15,180	73,789	4,026,026
2071	78	58,465	15,142	73,607	4,099,633
2072	79	58,321	15,105	73,426	4,173,059
2073	80	58,177	15,068	73,245	4,246,304
2074	81	58,033	15,031	73,064	4,319,368
2075	82	51,458	13,327	64,785	\$4,384,153
"SARAF	∃"	\$3,482,253	\$901,900	\$4.384.153	

LIFE CAR	LIFE CARE PLAN CALCULATION		MEDICAL SERVICES						(MS = MED SERVICES)	VICES)	1.75%
									(MC = MED COMMODITIES)	(MODITIES)	0.40%
NAME:	"Sarah"	ADOT:	21.0						(NMS = NON-MED SVCS)	D SVCS)	1.00%
DOI:	11/06/07	RLEDOT:	60.9						(NON-MC = NON-MED COMM)	I-MED COMM)	%00.0
DOT:	01/01/15	LEDOT:	81.9						(D = DISCOUNT RATE)	RATE)	1.25%
# OF DAY	# OF DAYS FROM DOT TO EOY =	364									
FIRS	FIRST YEAR FRACTION	0.9973									
	END OF LE =	11/25/75									
# 0F	# OF DAYS IN LAST YEAR	329									
LAS	LAST YEAR FRACTION	9006.0									
					# 0F		# OF	# OF UNITS		INITIAL YEAR LAST YEAR	LAST YEAR
			ITEM	COST PER UNIT UNITS USED	UNITS USED	per	YEARS	PER YEAR	YEARS PER YEAR ANNUAL COST	OF COST	OF COST
			Psychiatric Eval	\$350	-		-	1.00	\$350	2015	2015
			Psychiatrist Visits (2015-2016)	\$120	12		-	12.00	\$1,440	2015	2016
			Psychiatrist Visits (2017-2020)	\$120	9		-	6.00	\$720	2017	2020
			Psychiatrist Visits (2021-LE)	\$120	4		1	4.00	\$480	2021	2075

Smith Economics Group, Ltd.

Life Care Plan Costs

					36	2029				\$208	\$508	000	\$10,569
					35	2028				\$505	\$505	2000	\$10,061
					34	2027				\$503	¢503	000	\$9,556
					33	2026				\$500	¢500	0000	\$9,053
					32	2025				\$498	\$408	200	\$8,552
					31	2024				\$496	£40c	200	\$8,054
					30	2023				\$493	6402	0110	\$7,559
					29	2022				\$491	6404	- 040	\$7,066
					28	2021				\$488	6400	4400	\$6,575
					27	2020			\$729		\$700	67/4	\$6,086
					26	2019			\$725		9100	C7/¢	\$5,358
					25	2018			\$722		6700	27/8	\$4,632
					24	2017			\$718		4140	\$1.18	\$3,911
					23	2016		\$1,429			007.74	\$1,429	\$3,192
				TRIAL YEAR	22	2015	\$345	\$1,418			4	\$1,763	\$1,763
				T.	AGE	ITEM	Psychiatric Eval	Psychiatrist Visits (2015-2016)	Psychiatrist Visits (2017-2020)	Psychiatrist Visits (2021-LE)		ANNUAL PRESENT VALUE	CUMULATIVE TOTAL

Smith Economics Group, Ltd.

Life Care Plan Costs

\$11,080 \$11,593 \$12,108 \$12,626 \$13,147 \$13,670 \$14,196 \$14,724 \$15,255 \$15,789 \$16,325 \$16,864 \$17,405 \$17,949 \$18,496 \$19,046	\$18,49	\$17,949	\$17,405	\$16,864	\$16,325	\$15,789	\$15,255	\$14,724	\$14,196	\$13,670	\$13,147	\$12,626	\$12,108	\$11,593	\$11,080	CUMULATIVE TOTAL
\$550	\$547	\$544	\$542	\$539	\$536	\$534	\$531	\$528	\$526	\$523	\$521	\$518	\$516	\$513	\$510	49
\$550	\$547	\$544	\$542	\$539	\$536	\$534	\$531	\$528	\$526	\$523	\$521	\$518	\$516	\$513	\$510	69
+																
2045	2044	2043	2042	2041	2040	2039	2038	2037	2036	2035	2034	2033	2032	2031	2030	
52	51	20	49	48	47	46	45	4	43	42	41	40	39	38	37	1.0
																1

Smith Economics Group, Ltd.

Life Care Plan Costs

57 58 59 60 61 62 63 64 65 66 67 2050 2051 2052 2053 2054 2055 2056 2057 2059 2060 \$563 \$566 \$572 \$575 \$577 \$580 \$583 \$589 \$592 \$663 \$566 \$569 \$572 \$576 \$577 \$580 \$589 \$589 \$592	,623 \$28.218	31 \$27	\$27,03	\$26,442	\$25,857	\$25,273	\$24,693	\$24,116	\$23,541	\$22,970	\$22,401	\$21.835	\$21.271	\$20,711	\$19,598 \$20,153 \$20,711	865	\$19.
57 58 59 60 61 62 63 64 65 66 67 2050 2051 2052 2053 2054 2055 2056 2057 2059 2060 \$563 \$566 \$569 \$572 \$575 \$577 \$580 \$586 \$589 \$592	-	\$	\$589	\$586	\$583	\$580	\$577	\$575	\$572	\$569		\$563	\$561		\$558	\$555 \$55	H
57 58 59 60 61 62 63 64 65 66 67 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060			200 0	4200	\$283	\$280	1/6\$	\$5/5	\$572	\$569	\$566	\$563	\$561	m	\$558	\$555 \$558	-
57 58 59 60 61 62 63 64 65 66 67 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060	+	+	0014	C	001	000		i i								4	
57 58 59 60 61 62 63 64 65 66 67 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060																	
57 58 59 60 61 62 63 64 65 66 67 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060		+															
57 58 59 60 61 62 63 64 65 66 67	1	+	2059	2058	2057	2056	2055	2054	2053	2052	2051	2050	2049		2048	2047 2048	
	H	,	3	3	r e	3	70	5	2	n n	00	70	90		o o	54	+
		-	Č	L													
		-												- 1			
		1								-							

Smith Economics Group, Ltd.

Life Care Plan Costs

TABLE 18

MED SVCS

79 80 81 82
77 78 2070 2071
76 7
75
74
73
72
71
69
AGE:

Smith Economics Group, Ltd.

Life Care Plan Costs

LIFE CARE PLAN CALCULATION	NOIL	NON-MEDICAL SERVICES			-			(MS = MED SERVICES)	VICES)	1.75%
								(MC = MED COMMODITIES)	(MODITIES)	0.40%
NAME: "Sarah"	ADOT:	21.0						(NMS = NON-MED SVCS)	D SVCS)	1.00%
DOI: 11/6/2007	RLEDO	RLEDOT: 60.9						(NON-MC = NON-MED COMM)	I-MED COMM)	%00.0
DOT: 1/1/2015	LEDOT:	81.9						(D = DISCOUNT RATE)	RATE)	1.25%
# OF DAYS FROM DOT TO EOY =	OY = 364									
FIRST YEAR FRACTION	N 0.9973	3								
END OF LE =	11/25/75	75								
# OF DAYS IN LAST YEAR	4R 329									
LAST YEAR FRACTION	9006.0 N	9								
				# OF		# OF	# OF UNITS		INITIAL YEAR LAST YEAR	LAST YEAR
		ITEM	COST PER UNIT UNITS USED		per Y	YEARS	PER YEAR	PER YEAR ANNUAL COST	OF COST	OF COST
		Psychotherapy (2015-2016)	\$160	100		-	100.00	\$16,000	2015	2016
		Psychotherapy (2017-LE)	\$160	38		-	37.50	\$6,000	2017	2075
		Conjoint Therapy	\$180	300		61	4.93	\$887	2015	2075
		GED Subscription & Test	\$140	-		-	1.00	\$140	2015	2015
		Physical Capacities Evaluation	\$1,000	1		-	-1.00	\$1,000	2015	2015
		State Early Childhood Ed Cert	\$6,000	-		1	1.00	\$6,000	2016	2016
					1					
					-					

Smith Economics Group, Ltd.

Life Care Plan Costs

TABLE 18

NON-MED SVCS

	36	2029		\$5,725	\$846				\$6,571	\$100,622 \$107,242 \$113,845 \$120,431 \$127,002	
	35	2028		\$5,739	\$848				\$6,587	\$120,43	
	34	2027		\$5,753	\$850				\$6,603	\$113,845	
	33	2026		\$5,767	\$852				\$6,619	\$107,242	
	32	2025		\$5,781	\$854				\$6,636	\$100,622	
	33	2024		\$5.796	\$857				\$6,652	\$93,986	
	30	2023		\$5,810	\$859				\$6,669	\$87,334	
	29	2022		\$5,824	\$861				\$6,685	\$80,665	
	28	2021		\$5,839	\$863				\$6,702	\$73,980	
	27	2020		\$5,853	\$865				\$6,718	\$67,278	
	26	2019		\$5,868	\$867				\$6,735	\$60,560	
	25	2018		\$5,882	\$869				\$6,752	\$53,825	
	24	2017		\$5,897	\$871				\$6,768		
	23	2016	\$15,764		\$874			\$5,911	\$22,549	\$40,305 \$47,073	
TRIAL YEAR	22	2015	\$15,760		\$873	\$138	\$985		\$17,756	\$17,756	
	AGE	ITEM	Psychotherapy (2015-2016)	Psychotherapy (2017-LE)	Conjoint Therapy	GED Subscription & Test	Physical Capacities Evaluation	State Early Childhood Ed Cert	ANNUAL PRESENT VALUE	CUMULATIVE TOTAL	

Smith Economics Group, Ltd.

Life Care Plan Costs

52	2045		\$5,503	\$813				\$6,316	\$159,612 \$166,086 \$172,544 \$178,985 \$185,411 \$191,821 \$198,216 \$204,594 \$210,957 \$217,304 \$223,635 \$229,951
51	2044		\$5,516	\$815				\$6,331	\$223,635
20	2043		\$5,530	\$817				\$6,347	\$217,304
49	2042		\$5,543	\$819				\$6,363	\$210,957
48	2041		\$5,557	\$821				\$6,378	\$204,594
47	2040		\$5,571	\$823				\$6,394	\$198,216
46	2039		\$5,585	\$825				\$6.410	\$191,821
45	2038		\$5,599	\$827				\$6,426	\$185,411
44	2037		\$5,612	\$829				\$6,442	\$178,985
43	2036		\$5,626	\$831				\$6,458	\$172,544
42	2035		\$5,640	\$834				\$6,474	\$166,086
41	2034		\$5,654	\$836				\$6,490	\$159,612
40	2033		\$5,668	\$838				\$6.506	N
39	2032		\$5,682	\$840				\$6.522	\$146,616
88	2031		\$5,696	\$842				\$6.538	\$140.094
37	2030		\$5,710	\$844				\$6.554	\$133,556
AGE	ITEM	Psychotherapy (2015-2016)	Psychotherapy (2017-LE)	Conjoint Therapy	GED Subscription & Test	Physical Capacities Evaluation	State Early Childhood Ed Cert	ANNIJAI PRESENT VALUE	

Smith Economics Group, Ltd.

Life Care Plan Costs

2059 2060	\$5.315 \$5.302	\$784				98	\$322,836 \$328,907
2059	315					\$6,086	\$322
	\$5	\$786				\$6,101	\$316,751
2058	\$5.328	\$787				\$6,116	\$310,650
2057	\$5,342	\$789				\$6,131	\$304,534
2056	\$5,355	\$791				\$6,146	\$298,403
2055	\$5,368	\$793				\$6,161	\$261,296 \$267,519 \$273,726 \$279,918 \$286,095 \$292,256 \$298,403 \$304,534 \$310,650 \$316,751
2054	\$5.381	\$795				\$6,177	\$286,095
2053	\$5 395	\$797				\$6,192	\$279,918
2052	\$5 408	\$799				\$6,207	\$273,726
2051	\$5 421	\$801				\$6,223	\$267,519
2050	\$5 435	\$803				\$6,238	\$261,296
2049	\$5 448	\$805				\$6,254	\$255,058
2048	\$5.467	\$807				\$6,269	\$248,805
2047	\$5.475	\$809				\$6,285	\$236,251 \$242,536 \$248,805 \$255,058
2046	\$5.489	\$811				\$6,300	\$236,251
ITEM	otherapy (2015-2016)	Conjoint Therapy	Subscription & Test	Il Capacities Evaluation	arly Childhood Ed Cert		
	2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056	2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 () 85 475 \$5 462 \$5 48 \$5 435 \$5 421 \$5 408 \$5 395 \$5 381 \$5 358 \$5 355	2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 <th< td=""><td>2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 \$5,489 \$5,475 \$5,462 \$5,448 \$5,435 \$5,421 \$5,408 \$5,395 \$5,381 \$5,368 \$5,355 \$811 \$809 \$807 \$803 \$801 \$799 \$797 \$795 \$793 \$791</td><td>2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2057 2057 2057 2057 2057 2057 2057 2057 2057 2057 <th< td=""><td>2046 2047 2048 2050 2050 2051 2052 2053 2054 2055 2056 2057 2057 <th< td=""><td>2046 2047 2048 2050 2051 2052 2053 2054 2055 2056 \$5,489 \$5,475 \$5,448 \$5,435 \$5,421 \$5,408 \$5,395 \$5,381 \$5,368 \$5,355 \$811 \$809 \$807 \$805 \$801 \$799 \$797 \$795 \$793 \$791 \$6,300 \$6,284 \$6,254 \$6,223 \$6,207 \$6,177 \$6,167 \$6,146 \$6,146</td></th<></td></th<></td></th<>	2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 \$5,489 \$5,475 \$5,462 \$5,448 \$5,435 \$5,421 \$5,408 \$5,395 \$5,381 \$5,368 \$5,355 \$811 \$809 \$807 \$803 \$801 \$799 \$797 \$795 \$793 \$791	2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2057 2057 2057 2057 2057 2057 2057 2057 2057 2057 <th< td=""><td>2046 2047 2048 2050 2050 2051 2052 2053 2054 2055 2056 2057 2057 <th< td=""><td>2046 2047 2048 2050 2051 2052 2053 2054 2055 2056 \$5,489 \$5,475 \$5,448 \$5,435 \$5,421 \$5,408 \$5,395 \$5,381 \$5,368 \$5,355 \$811 \$809 \$807 \$805 \$801 \$799 \$797 \$795 \$793 \$791 \$6,300 \$6,284 \$6,254 \$6,223 \$6,207 \$6,177 \$6,167 \$6,146 \$6,146</td></th<></td></th<>	2046 2047 2048 2050 2050 2051 2052 2053 2054 2055 2056 2057 2057 <th< td=""><td>2046 2047 2048 2050 2051 2052 2053 2054 2055 2056 \$5,489 \$5,475 \$5,448 \$5,435 \$5,421 \$5,408 \$5,395 \$5,381 \$5,368 \$5,355 \$811 \$809 \$807 \$805 \$801 \$799 \$797 \$795 \$793 \$791 \$6,300 \$6,284 \$6,254 \$6,223 \$6,207 \$6,177 \$6,167 \$6,146 \$6,146</td></th<>	2046 2047 2048 2050 2051 2052 2053 2054 2055 2056 \$5,489 \$5,475 \$5,448 \$5,435 \$5,421 \$5,408 \$5,395 \$5,381 \$5,368 \$5,355 \$811 \$809 \$807 \$805 \$801 \$799 \$797 \$795 \$793 \$791 \$6,300 \$6,284 \$6,254 \$6,223 \$6,207 \$6,177 \$6,167 \$6,146 \$6,146

Smith Economics Group, Ltd.

Life Care Plan Costs

	ITEM	TOTALS	\$31,524	\$323,626	\$49,574	\$138	\$985	\$5,911			
83		2075		\$4,601	\$680				er 284	40,50	\$411,758
200		2074		\$5,122	\$757				\$5 870	0000	\$406,476
08		2073		\$5,135	\$759				¢£ 803	0000	\$400,598
79		2072		\$5,147	\$761				85 909	00000	0 \$353,041 \$359,037 \$365,018 \$370,985 \$376,937 \$382,874 \$388,796 \$394,704 \$400,598 \$406,476 \$411,758
78		2071		\$5,160	\$763				65 000	40,040	\$388,796
11		2070		\$5,173	\$764				&E 027	100,00	\$382,874
76		2069		\$5,186	\$766				¢ E 0 E 2	200,04	\$376,937
27.		2068		\$5,198	\$768				750 36	100,00	\$370,985
77		2067		\$5,211	\$770				100	40,30	\$365,018
73	2	2066		\$5,224	\$772				000	40,000	\$359,037
72	7,	2065		\$5,237	\$774				4	#P,UTT	\$353,041
74		2064		\$5,250	\$776				000	\$6,026	\$347,030
75	2	2063		\$5,263	\$778					\$6,041	\$334,963 \$341,004 \$347,03
g	3	2062		\$5.276	\$780					\$6,056	\$334,963
	AGE	ITEM	Psychotherapy (2015-2016)	Psychotherapy (2017-LE)	Conjoint Therapy	GFD Subscription & Test	Physical Capacities Evaluation	State Farly Childhood Ed Cert		ANNUAL PRESENT VALUE	CUMULATIVE TOTAL

Smith Economics Group, Ltd.

Life Care Plan Costs

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TABLE 18

LIFE CAR	JIFE CARE PLAN CALCULATION		TOTAL	(MS = MED SERVICES)	1.75%					
				(MC = MED COMMODITIES)	0.40%					
NAME:	"Sarah"	ADOT: 21.0	21.0	(NMS = NON-MED SVCS)	1.00%					
: log	11/06/07	RLEDOT: 60.9	6.09	(NON-MC = NON-MED COMM)	0.00%					
DOT:	01/01/15	LEDOT: 81.9	81.9	(D = DISCOUNT RATE)	1.25%					
# OF DAY	# OF DAYS FROM DOT TO EOY =	364								
FIRS	FIRST YEAR FRACTION	0.9973				COST PROJECTIONS TRIAL YEAR	TRIAL YEAR			
	END OF LE ≈	11/25/75								
# OF	# OF DAYS IN LAST YEAR	329				AGE	22	23	24	25
LAS	LAST YEAR FRACTION	9006.0								
						CUMULATIVE TOTALS	2015	2016	2017	2018
						MEDICAL SERVICES	\$1,763	\$3,192	\$3,911	\$4,632
						NON MED SERVICES	\$17,756	\$40,305	\$47,073	\$53,825
						GRAND TOTAL	\$19,519	\$43,497	\$50,984	\$58,457

Smith Economics Group, Ltd.

Life Care Plan Costs

\$165,748	\$158,724	\$151,687	\$144,636	\$137,571	\$130,493	\$102,041 \$109,174 \$116,294 \$123,400 \$130,493 \$137,571 \$144,636 \$151,687 \$158,724 \$165,748	\$116,294	\$109,174	\$102,041	\$94.893	\$87,731	\$80,555	\$73,365	\$65,918	GRAND TOTAL
\$153,122	\$146,616	\$140,094	\$133,556	\$127,002	\$120,431	\$113,845	\$107,242	\$100,622	\$93,986	\$87,334	\$80,665	\$73,980	\$67,278	\$60,560	NON MED SERVICES
	\$12,108	\$11,593	\$11,080	\$10,569	\$10,061	\$9,556	\$9,053	\$8,552	\$8,054	\$7,559	\$7,066	\$6,575	\$6,086	\$5,358	MEDICAL SERVICES
2033	2032	2031	2030	2029	2028	2027	2026	2025	2024	2023	2022	2021	2020	2019	CUMULATIVE TOTALS
40	39	38	37	36	32	34	33	32	34	30	29	28	27	26	AGE:
															COST PROJECTIONS
										W.					

Smith Economics Group, Ltd.

Life Care Plan Costs

		54 55	2047 2048	\$20,153 \$20,711	\$242,536 \$248,805	\$255,849 \$262,689 \$269,516
		53	2046	\$19,598	\$236,251 \$	\$255,849 \$
		52	2045	\$19,046	\$229,951	\$248,997
		51	2044	\$18,496	\$223,635	\$172,759 \$179,756 \$186,739 \$193,709 \$200,666 \$207,610 \$214,540 \$221,458 \$228,362 \$235,253 \$242,131 \$248,997
		50	2043	\$17,949	\$217,304	\$235,253
		49	2042	\$17,405	\$210,957	\$228,362
		48	2041	\$16,864	\$204,594	\$221,458
		47	2040	\$16,325	\$198,216	\$214,540
		46	2039	\$15,789	\$191,821	\$207,610
		45	2038	\$15,255	\$185,411	\$200,666
		44	2037	\$14,724	\$178,985	\$193.709
		43	2036	\$14,196 \$14,724	\$172,544	\$186,739
		42	2035	\$13,670	\$166,086 \$172,544	\$179,756
		41	2034	\$13,147 \$13,670	\$159,612	\$172,759
	COST PROJECTIONS	AGE:	CUMULATIVE TOTALS	MEDICAL SERVICES	NON MED SERVICES	GRAND TOTAL

Smith Economics Group, Ltd.

Life Care Plan Costs

TABLE 18

OTAL

									1						
"	56	22	28	59	09	61	62	63	64	65	99	29	89	69	70
12	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063
\$21	\$21,271	\$21,835	\$21,835 \$22,401 \$22,970	\$22,970	\$23,541	\$24,116	\$24,693	\$25,273	\$25,857	\$26,442	\$27,031	\$27,623	\$28,218	\$28,815	\$29,416
\$25	5,058	\$261,296	\$255,058 \$261,296 \$267,519 \$273,726	\$273,726	\$279,918	\$286,095	\$292,256	\$298,403	\$304,534	\$310,650	\$316,751	\$322,836	\$328,907	\$334,963	\$341,004
\$27	6,330	\$283,131	\$276,330 \$283,131 \$289,920 \$296,696	\$296,696		\$303,460 \$310,211	\$316,950	\$323,676	\$330,390	\$337,092	\$343,782	\$350,459		\$357,125 \$363,778	\$370,420

Smith Economics Group, Ltd.

Life Care Plan Costs

TABLE 18

TOTAL

COST PROJECTIONS												
AGE:	7.1	72	73	74	75	92	77	78	62	08	84	82
CUMULATIVE TOTALS	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075
MEDICAL SERVICES	\$30,019	\$30,626	\$31,235	\$31,848	\$32,463	\$33,082	\$33,704	\$34,328	\$34,956	\$35,587	\$36,221	\$36,795
NON MED SERVICES	\$347,030	\$353,041	\$359,037	\$365,018	\$370,985	\$365,018 \$370,985 \$376,937	\$382,874	\$388,796	\$382,874 \$388,796 \$394,704 \$400,598 \$406,476 \$411,758	\$400,598	\$406,476	\$411,758
GRAND TOTAL	\$377,049	\$383,667	\$390,272	\$390,272 \$396,866 \$403,448 \$410,019 \$416,577 \$423,125 \$429,660 \$436,184 \$442,697 \$448,552	\$403,448	\$410,019	\$416.577	\$423,125	\$429,660	\$436,184	\$442,697	\$448,552

Smith Economics Group, Ltd.

Life Care Plan Costs

LOSS OF PAST RVL OF "SARAH" 2007 - 2014

YEAR ****	AGE ***	RVL *****	CUMULATE
2007	14	\$8,814	\$8,814
2008	15	58,564	67,378
2009	16	60,157	127,535
2010	17	61,059	188,594
2011	18	62,867	251,461
2012	19	63,961	315,422
2013	20	64,920	380,342
2014	21	66,218	\$446,560

[&]quot;SARAH" \$446,560

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 62 of 77 $_{\tt Table\ 20}$

PRESENT VALUE OF FUTURE RVL OF "SARAH" 2015 - 2075

			DISCOUNT	PRESENT	
YEAR	AGE	RVL	FACTOR	VALUE	CUMULATE
****	***	*****	*****	*****	*****
2015	22	\$67,543	0.98765	\$66,709	\$66,709
2016	23	67,543	0.97546	65,885	132,594
2017	24	67,543	0.96342	65,072	197,666
2018	25	67,543	0.95152	64,269	261,935
2019	26	67,543	0.93978	63,476	325,411
2020	27	67,543	0.92817	62,691	388,102
2021	28	67,543	0.91672	61,918	450,020
2022	29	67,543	0.90540	61,153	511,173
2023	30	67,543	0.89422	60,398	571,571
2024	31	67,543	0.88318	59,653	631,224
2025	32	67,543	0.87228	58,916	690,140
2026	33	67,543	0.86151	58,189	748,329
2027	34	67,543	0.85087	57,470	805,799
2028	35	67,543	0.84037	56,761	862,560
2029	36	67,543	0.82999	56,060	918,620
2030	37	67,543	0.81975	55,368	973,988
2031	38	67,543	0.80963	54,685	1,028,673
2032	39	67,543	0.79963	54,009	1,082,682
2033	40	67,543	0.78976	53,343	1,136,025
2034	41	67,543	0.78001	52,684	1,188,709
2035	42	67,543	0.77038	52,034	1,240,743
2036	43	67,543	0.76087	51,391	1,292,134
2037	44	67,543	0.75147	50,757	1,342,891
2038	45	67,543	0.74220	50,130	1,393,021
2039	46	67,543	0.73303	49,511	1,442,532
2040	47	67,543	0,72398	48,900	1,491,432
2041	48	67,543	0.71505	48,297	1,539,729
2042	49	67,543	0.70622	47,700	1,587,429
2043	50	67,543	0.69750	47,111	1,634,540
2044	51	67,543	0.68889	46,530	1,681,070
2045	52	67,543	0.68038	45,955	1,727,025
2046	53	67,543	0.67198	45,388	1,772,413
2047	54	67,543	0.66369	44,828	1,817,241
2048	55	67,543	0.65549	44,274	1,861,515
2049	56 -7	67,543	0.64740	43,727	1,905,242
2050	57	67,543	0.63941	43,188	1,948,430
2051	58 50	67,543	0.63152	42,655	1,991,085 2,033,213
2052	59 60	67,543 67,543	0.62372 0.61602	42,128 41,608	2,033,213
2053	61	67,543	0.60841	41,000	2,115,915
2054 2055	62	67,543	0.60090	40,587	2,115,513
2056	63	67,543	0.59348	40,085	2,196,587
2057	64	67,543	0.58616	39,591	2,236,178
2058	65	67,543	0.57892	39,102	2,275,280
2059	66	67,543	0.57072	38,619	2,313,899
2060	67	67,543	0.56471	38,142	2,352,041
2061	68	67,543	0.55774	37,671	2,389,712
2062	69	67,543	0.55086	37,207	2,426,919
2063	70	67,543	0.54406	36,747	2,463,666
2064	71	67,543	0.53734	36,294	2,499,960

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 63 of 77 $_{\tt Table\ 20\ (Cont.)}$

PRESENT VALUE OF FUTURE RVL OF "SARAH" 2015 - 2075

			DISCOUNT	PRESENT	
YEAR	AGE	RVL	FACTOR	VALUE	CUMULATE
****	***	*****	*****	******	*****
2065	72	67,543	0.53071	35,846	2,535,806
2066	73	67,543	0.52415	35,403	2,571,209
2067	74	67,543	0.51768	34,966	2,606,175
2068	75	67,543	0.51129	34,534	2,640,709
2069	76	67,543	0.50498	34,108	2,674,817
2070	77	67,543	0.49874	33,686	2,708,503
2071	78	67,543	0.49259	33,271	2,741,774
2072	79	67,543	0.48651	32,860	2,774,634
2073	80	67,543	0.48050	32,454	2,807,088
2074	81	67,543	0.47457	32,054	2,839,142
2075	82	59,956	0.46936	28,141	\$2,867,283

"SARAH"

\$2,867,283

Case 1:13-cr-01876-JB Document 193-3 Filed 05/19/17 Page 64 of 77 $_{\tt Table\ 21}$

PRESENT VALUE OF NET RVL OF "SARAH" 2007 - 2075

YEAR	AGE	RVL	CUMULATE
****	* * *	*******	*****
2007	14	\$8,814	\$8,814
2008	15	58,564	67,378
2009	16	60,157	127,535
2010	17	61,059	188,594
2011	18	62,867	251,461
2012	19	63,961	315,422
2013	20	64,920	380,342
2014	21	66,218	446,560
2015	22	66,709	513,269
2016	23	65,885	579,154
2017	24	65,072	644,226
2018	25	64,269	708,495
2019	26	63,476	771,971
2020	27	62,691	834,662
2021	28	61,918	896,580
2022	29	61,153	957,733
2023	30	60,398	1,018,131
2024	31	59,653	1,077,784
2025	32	58,916	1,136,700
2026	33	58,189	1,194,889
2027	34	57,470	1,252,359
2028	35	56,761	1,309,120
2029	36	56,060	1,365,180
2030	37	55,368	1,420,548
2031	38	54,685	1,475,233
2032	39	54,009	1,529,242
2033	40	53,343	1,582,585
2034	41	52,684	1,635,269
2035	42	52,034	1,687,303
2036	43	51,391	1,738,694
2037	44	50,757	1,789,451
2038	45	50,130	1,839,581
2039	46	49,511	1,889,092
2040	47	48,900	1,937,992
2041	48	48,297	1,986,289
2042	49 50	47,700 47,111	2,033,989 2,081,100
2043 2044	50 51	46,530	
2044	52	45,955	2,127,630 2,173,585
2045	53	45,388	2,173,383
2040	54		
2047	55	44,828 44,274	2,263,801 2,308,075
2049	56	43,727	
2049	57	43,188	2,351,802 2,394,990
2050	58	42,655	2,394,990
2051	59	42,635	2,437,645
2052	60	41,608	2,479,773
2053	61	41,008	2,562,475
2054	62	40,587	2,603,062
2056	63	40,085	2,643,147
2000	O J	40,000	2,043,147

PRESENT VALUE OF NET RVL OF "SARAH" 2007 - 2075

YEAR	AGE	RVL	CUMULATE
****	***	*****	*****
2057	64	39,591	2,682,738
2058	65	39,102	2,721,840
2059	66	38,619	2,760,459
2060	67	38,142	2,798,601
2061	68	37,671	2,836,272
2062	69	37,207	2,873,479
2063	70	36,747	2,910,226
2064	71	36,294	2,946,520
2065	72	35,846	2,982,366
2066	73	35,403	3,017,769
2067	74	34,966	3,052,735
2068	75	34,534	3,087,269
2069	76	34,108	3,121,377
2070	77	33,686	3,155,063
2071	78	33,271	3,188,334
2072	79	32,860	3,221,194
2073	80	32,454	3,253,648
2074	81	32,054	3,285,702
2075	82	28,141	\$3,313,843

[&]quot;SARAH" \$3,313,843

EXHIBIT 12

Smith Economics Group, Ltd.

A Division of Corporate Financial Group

Economics / Finance / Litigation Support

Stan V. Smith, Ph.D. President

STAN V. SMITH, PH.D.

Smith Economics Group, Ltd. -- Consultants and Experts in Economics and Finance. President, 11/85 to present. Assisted in the successful resolution of thousands of lawsuits on behalf of clients that include many dozens of the nation's largest law firms, the U.S. Department of Justice, as well as thousands of other prominent plaintiff and defense law firms in almost every state. Firm provides economic and financial consulting and economic legal analysis in federal and state courts on damages of every sort including: Antitrust damages, patent valuation, business losses, lost wages and other injury losses, business valuation, hedonic damages, product liability, pension fund evaluation and withdrawal liability, security losses, commercial damages, employment discrimination, identity theft and FCRA credit damages.

- <u>DePaul University.</u> -- Adjunct Professor, College of Law, 1990 to 1994. Taught a full three-credit course in Advanced Remedies Analysis of Economic Damages in Litigation, based on my textbook on Forensic Economics; delivered lectures to other courses in subsequent years. This was the first course taught nationwide in the area of Forensic Economics.
- <u>Ibbotson Associates, Inc.</u> -- Economic and Financial Consultants. Principal and Managing Director; Originator of SBBI Subscription Services, 11/81 to 11/85. Firm provides consulting to hundreds of the nation's most prominent money managers, law firms, brokerage firms, and pension funds.
- <u>Seaquest International, Inc.</u> -- Founder and President, 7/77 to 11/81. Developed and financed sophisticated research, search, and recovery technologies for ancient underwater artifacts.
- The December Group, Ltd. -- Investment Banking Consultants. Associate Economic Analyst 12/74 to 7/77. Firm specialized in mergers and acquisitions, leveraged buy-outs, divestitures and financing specialized start-ups with venture capital.
- <u>JPMorgan Chase Bank Chicago.</u> -- Staff Economist, 3/74 to 12/74. Analyzed bank credit and service pricing policies.
- <u>Federal Reserve System.</u> -- Staff Economist at Board of Governors, Washington, D.C. 9/73 to 2/74.
- University of Chicago. -- Lecturer in Public Policy Economics, 3/73 to 6/73.
 Research Assistant in Economics, 3/70 to 6/73.
- <u>Midlothian Manufacturing Co.</u> -- Vice President, 9/68 to 3/73. Responsible for Marketing to retail and industrial clients; responsible for production control.

EDUCATIONAL BACKGROUND:

- University of Chicago, Chicago IL. Ph.D. in Economics, 1997; Support Areas in Finance and Econometrics. Honors: Allied Chemical Scholar and Federal Reserve Internship.
- University of Chicago, Chicago, IL. Master's Degree, 1972, Graduate School of Business; Field of Concentration in Economics.
- Cornell University, Ithaca, NY. Bachelor of Science, Operations Research, 1968; Field of Concentration in Statistics, Computer Science and Industrial Engineering, Honors: John McMullen Scholar.

PROFESSIONAL ACTIVITIES:

American Academy of Economic & Financial Experts, <u>Journal of Legal Economics</u>, Manuscript Referee, 199x-2008.

American Arbitration Association, Arbitrator, 1994 to 1996;

American Board of Disability Analysts, Member & Diplomat, 2001 to present;

American Board of Disability Analysts, Professional Advisory Council, 2002 to present;

American College of Forensic Examiners, Fellow and Board Certified Forensic Examiner, 1996 to 2005;

American Economic Association, Member, 1985 to present;

American Finance Association, Member, 1985 to present;

Collegium of Pecuniary Damages Experts, Charter Member, 2008-2011;

Journal of the American Rehabilitation Economics Association: The Earnings Analyst, Manuscript Referee, 1998 to 2002;

Journal of Forensic Economics, Board of Editors, 1990 to 2001;

Journal of Forensic Economics, Manuscript Referee, 1990 to 2003;

National Academy of Economic Arbitrators, Founder and Charter Member, 1989 to 2005;

National Association of Forensic Economics, Vice President, 2000 to 2003;

National Association of Forensic Economics, Member, 1988 to present;

National Futures Association's Panel of Arbitrators, Arbitrator, 1994 to present;

PUBLICATIONS:

- Author, "Historical Returns on Investment Instruments," <u>Handbook of Modern Finance</u> 1985, with Roger Ibbotson and Larry Siegel; Dennis Logue, ed., Warren, Gorham & Lamont, New York.
- Author, 1988 Supp.to Vol 13, Am Jur Proof of Facts 2d on Hedonic Damages.
- Author, "Economist Proposes Relief From Present Value Ruling," <a href="https://example.com/Proposes-Relief-From Present Value Ruling," Chicago Daily Law Bulletin, June 8, 1988.
- Author, "Hedonic Damages" Illinois Tort Report, June, 1988.
- Author, "Hedonic Damages in Wrongful Death Cases," the ABA Journal, Sept, 1988.
- Author, "Hedonic Damages," <u>The Audio Lawyer</u>, Vol. 6 No. 8, ALI-ABA, February, 1989. 435

- Author, "The Hedonic Value of Life: Economic Expert Witness Testimony in Injury and Wrongful Death," Expert Evidence Reporter, Vol. 1, No. 1, September 1989, Shepard's McGraw-Hill.
- Co-author: Economic/Hedonic Damages: A Practice Book for Plaintiff and Defense Attorneys, with M. L. Brookshire, Anderson Publishing Co., Cinn., Ohio, 1990.
- Co-author, "Hedonic Damages and Personal Injury: A Conceptual Approach," <u>Journal of Forensic Economics</u>, 3(1), 1990, pp. 1-8.
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- Author, "Hedonic Damages," with G. Magnarini, <u>Wisconsin Lawyer</u>, Vol. 64, No. 2, February 1991.
- Author, "Hedonic Damages: Assessing the Loss of Enjoyment of Life," CaliforniaState Bar Bulletin, Vol. 1, No. 8, June 1991.
- Co-author, "Hedonic Damages and Personal Injury: A Conceptual Approach," <u>Journal of Forensic Economics</u>, 3(1), 1990, pp. 1-8; Reprinted in <u>A Hedonics Primer for Economists and Attorneys</u>, Compiled and Edited by John O. Ward, Lawyers & Judges Publishing Co., Chapter 7, pp. 121-129, 1992.
- Co-author: 1991/1992 Cumulative Supplement to Economic/Hedonic Damages: A Practice Book for Plaintiff and Defense Attorneys, with M. L. Brookshire, Anderson Publishing Co., Cinn., Ohio, 1992.
- Author, "Hedonic Damages in the Courtroom Setting A Bridge Over Troubled Waters,," <u>Journal of Forensic Economics</u>, 3(3), 1990, pp. 41-49; Reprinted in <u>A Hedonics Primer for Economists and Attorneys</u>, Compiled and Edited by John O. Ward, Lawyers & Judges Publishing Co., Chapter 6, pp. 111-120, 1992.
- Author, "Spotting Bias in Plaintiffs' Economic Loss Reports: A Primer for both Sides," Illinois Bar Journal, Vol 80, No. 12, December, 1992, pp. 635-638.
- Author, "Life Values: Measuring the Loss of Enjoyment of Life Economic Analysis whose time has come," <u>The Brief</u>, Summer 1993, Vol. 22, No. 4 pp. 24-27, 62-63, The American Bar Association.
- Co-author: 1992/1993 Cumulative Supplement to Economic/Hedonic Damages: A Practice Book for Plaintiff and Defense Attorneys, with M. L. Brookshire and Charles W. de Seve, Anderson Publishing Co., Cinn., Ohio, 1993.
- Author, "Evaluating the Loss of Enjoyment of Life Hedonic Damages," in Charles N. Simkins, ed., <u>Analysis</u>, <u>Understanding and Presentation of Cases Involving</u>
 Traumatic Brain Injury, National Head Injury Foundation, Wash., DC, 1993.
- Author, "Hedonic Damages in Personal Injury and Wrongful Death Litigation," in Gaughan and Thornton, eds. <u>Litigation Economics</u>, Contemporary Studies in Economic and Financial Analysis, Vol 74, JAI Press, Greenwich, CT, 1993.
- Author, "Economic Evaluation of the Loss of Enjoyment of Life HedonicDamages," in <u>Damages in Tort Actions</u>, Ch. 124, Release 29 February 1994, Pub. 309, Mathew Bender & Co., New York.
- Author, "Measuring the Loss of Enjoyment of Life in Personal Injury Cases Hedonic Damages," <u>Journal of the Massachusetts Academy of Trial Attorneys</u>, Vol 2, No. 1, July, 1994, pp. 65-67.
- Author, 3-Part Series, "Two Plus Two Equals -- What?" October, 1994, p. 21; "Detecting Bias in Economics," November, 1994, pp. 14 & 21; "Striving for Economic Fairness," December, 1994, pp. 24-25, California Bar Journal, The Experts.

- Author, "Measuring the Loss of Enjoyment of Life in Personal Injury Cases Hedonic Damages," <u>MTLA News</u>, Vol. 6, No. 4, December, 1994, pp. 3-5, Maine Trial Lawyers Association.
- Author, "Hedonic Damages: Measuring The Loss of Enjoyment of Life in Personal Injury Cases," <u>The Prairie Barrister</u>, Vol. 1, No. 1, Winter, 1995, pp. 3, 4, & 12, Nebraska Association of Trial Attorneys.
- Author, "Measuring The Loss of Enjoyment of life in Personal Injury Cases in Ohio Hedonic Damages," <u>Ohio Trial</u>, Vol. 6, Issue 3, Summer 1995, pp. 13-16, Ohio Academy of Trial Lawyers Education Foundation.
- Author, "Measuring The Loss of Enjoyment of Life in Personal Injury Cases Hedonic Damages," <u>The Advocate</u>, Vol. 22, No. 5, September/October, 1995, pp. 14-16, 22, The Kentucky Academy of Trial Attorneys.
- Author, "Damages for the Value of Life," North Dakota Trial Lawyers <u>The Pleader</u>, Vol. 18, No. 4, September 1995, pp. 9-11, 24.
- Author, "Hedonic Damages Measuring The Loss of Enjoyment of Life in Personal Injury Cases," <u>Law Reporter</u>, The Journal of the Hawaii Trial lawyers Association, Vol. 7, No. 9, September 1995, pp. 8-10.
- Author, "Measuring The Loss of Enjoyment of Life in Personal Injury Cases in Arizona Hedonic Damages," <u>Advocate</u>, Arizona Trial Lawyers Association, November 1995, pp. 5, 7, 15.
- Co-author, "Hedonic Damages and Personal Injury: A Conceptual Approach," <u>Journal of Forensic Economics</u>, 3(1), 1990, pp. 1-8; Reprinted in <u>A New Hedonics Primer for Economists and Attorneys</u>, Compiled and Edited by Thomas R. Ireland and John O. Ward, Lawyers & Judges Publishing Co., Reading 25, 1996, pp. 325-334.
- Author, "Hedonic Damages Measuring the Loss of Enjoyment of Life in P.I. Cases," <u>In Brief</u>, Iowa Trial Lawyers Association, Vol. 7/Issue 1, January-February 1996, pp. 13-15.
- Author, "Hedonic Damages in Personal Injury and Wrongful Death Litigation," in Gaughan and Thornton, eds. <u>Litigation Economics</u>, Contemporary Studies in Economic and Financial Analysis, Vol 74, JAI Press, Greenwich, CT, 1993; Reprinted in <u>A New Hedonics Primer for Economists and Attorneys</u>, Compiled and Edited by Thomas R. Ireland and John O. Ward, Lawyers & Judges Publishing Co., Reading 3, 1996, pp. 15-36.
- Author, "Measuring the Loss of Enjoyment of Life in Personal Injury Cases and Wrongful Death Cases in New Mexico Hedonic Damages," The New Mexico Trial Lawyer, New Mexico Trial Lawyers' Foundation, Vol. XXIV, No. 3, March, 1996, pp. 1, 60-63.
- Author with Introduction by Darrel W. Aherin, "Measuring The Loss of Enjoyment of Life in Personal Injury Cases Hedonic Damages," <u>Idaho Trial Lawyers</u>
 <u>Association Journal</u>, Volume 25, Number 2, Summer 1996, pp. 32-36.
- Author, "The Value of Life to Close Family Members: Calculating the Loss of Society and Companionship," The New Hedonics Primer for Economists and Attorneys, Second Edition, Edited by Thomas R. Ireland and John O. Ward, Lawyers & Judges Publishing Co., 1996, pp. 377-384.
- Author, "Pseudo-Economists The New Junk Scientists," Federation of Insurance & Corporate Counsel Quarterly, Vol. 47, No. 1, Fall 1996, pp. 95-105.
- Author with Introduction by Darrel W. Aherin, "Measuring The Loss of Enjoyment of Life in Personal Injury Cases in Idaho Hedonic Damages," <u>Western Chronicle</u>, N/D 1996, Western Trial Lawyers Association, pp. 32, 35-36.
- Author, "Measuring The Loss of Enjoyment of Life in Personal Injury Cases in Washington Hedonic Damages," <u>Trial News</u>, Vol. 32, Number 5, January 1997, Washington State Trial Lawyers Association, pp. 29-30.

- Author, "Jury Verdicts in Drunken Driving Cases," University of Chicago Ph.D. Thesis, UMI Dissertation Services, Ann Arbor, MI, 1997.
- Author, "The Value of Life to Close Family Members: Calculating the Loss of Society and Companionship," <u>American Rehabilitation Economics Association 1997</u>
 Monograph, pp. 10-16.
- Author, Abstract: "Jury Verdicts in Drunken Driving Cases," <u>Journal of Forensic</u> <u>Economics</u>, 11(1), 1998, p. 67-68.
- Author, "Why Juries Can Be Trusted," <u>Voir Dire</u>, Vol. 5, Issue 3, Summer 1998, American Board of Trial Advocates, pp. 19-21 & 25.
- Author, "Measuring The Loss of Enjoyment of Life in Personal Injury Cases Hedonic Damages," <u>The Neurolaw Letter</u>, Vol. 9, No. 8, April 2000, pp. 45, 48-49.
- Author, "Jury Verdicts and the Dollar Value of Human Life," <u>Journal of Forensic</u> Economics, 13(2), 2000, pp. 169-188.
- Author, "Hedonic Damages," Izabela Z. Schultz, Douglas O. Brady, Steven Carella, Eds., <u>Psychological Injuries at Trial</u>, Torts Section, American Bar Association, 2003.
- Contributor, "Economic Foundations of Injury and Death Damages," Roger T. Kaufman, James D. Rodgers, Gerald D. Martin, Edward Elgar Publishing, Inc., 2005.
- Author, "Don't Overlook the Loss of Expanded Family Services," <u>Trial</u>, Vol. 42, No. 3, "Good Counsel" Column, March 2006, pg. 73.
- Co-author, "What is Your Value?" Chapter 2 in <u>Six-Figure Salary Negotiation</u>, Michael Zwell, Platinum Press, 2008.
- Co-Author, "Jury Verdicts in Drunken Driving Cases," Review of Law & Economics, Berkeley Press, 2008.
- Contributor, "Determining Economic Damages," Gerald D. Martin, James Publishing Inc., 2008 & previous years' editions.
- Co-Author, "Estimating the Value of Family Household Management Services: Approaches and Markups," <u>Forensic Rehabilitation & Economics</u>, Vol 3, No. 2, 2010, with David A. Smith and Stephanie R. Uhl, pp. 85-94.
- Co-Author, "Credit Damage: Causes, Consequences and Valuation," <u>Forensic</u>
 <u>Rehabilitation & Economics</u>, Vol 4, No. 1, 2011, with David A. Smith and Stephanie R. Uhl, pp. 27-32.
- Co-Author, "Reply to Tinari's Comment on 'Estimating the Value of Family Household Management Services: Approaches and Markups,'" Forensic
 Rehabilitation & Economics, Vol 4, No. 1, 2011, with David A. Smith and Stephanie R. Uhl, pp. 37-38.
- Co-Author, "A Response to Jayne's Comment on 'Estimating the Value of Family Household Management Services: Approaches and Markups,'" Forensic Rehabilitation & Economics, Vol 4, No. 1, 2011, with David A. Smith and Stephanie R. Uhl, pp. 39-40.
- Co-Author, "A Reply to Mr. Climo's Credit Damage Comment," <u>Forensic</u>
 <u>Rehabilitation & Economics</u>, Vol 5, No. 1, 2012, with David A. Smith and Stephanie R. Uhl, pp. 75-76.
- Contributor, "Lost Earnings Report: Economist Expert," How To Write An Expert Witness Report, James J. Mangraviti, Jr., Steven Babitsky, Nadine Nasser Donovan, SEAK, Inc, The Expert Witness Training Company, 2014, pp. 527-542.

Originator of Ibbotson Associates' Stocks, Bonds, Bills, and Inflation (SBBI) Yearbook and Companion Services published by Morningstar, Inc. SBBI is the authoritative compendium of U. S. financial and investment performance data from 1926 to the present. SBBI is widely relied upon and regarded as the standard reference in courts of law and by the academic, actuarial and investment community. 2008 and all editions since 1993.

PROFILES:

The Wall Street Journal, page 1 feature article with photo;
The Best Lawyer's in America: Directory of Expert Witnesses;
National Law Journal, page 1 feature article with photo;
Who's Who in the World;

Who's Who in America;

Who's Who in Finance and Industry;

Who's Who in Science and Engineering;

Who's Who in the Midwest;

Who's Who of Emerging Leaders of America;

Chicago Daily Law Bulletin, page 1 feature article;

Chicago Reader, Section 1 feature article with photo;

Like Judgment Day: The Ruin and Redemption of A Town Called Rosewood, D'Orso, Michael, 1996, Pg. 237.

NATIONAL PRESENTATIONS:

- Arizona: Brain Injury Association 13th Annual Conference for Attorneys, Phoenix, September 16, 1999;
- California: American Bar Assn. Annual Meeting, San Francisco, August 10, 1992; California: American Trial Lawyers Association 2005 Winter Convention, "Making Tangible the Intangible: Replacement Household/Family Services", Palm Springs, January 29, 2005;
- Canada: Association of Trial Lawyers of America Annual Meeting, Economic Damages, Toronto, 1991;
- District of Columbia: Larry King Live, Washington, May 22, 1989;
- District of Columbia: National Institute for Trial Advocacy (NITA), Seventh Annual Washington DC Masters Advocacy Program, "Direct and Cross Examination of an Economic Witness," Washington, October 15, 1991;
- District of Columbia: National Assn. of Protection & Advocacy Systems, Inc., 19th Annual Conference, "Assessment and Proof of Damages," Washington, May 30, 1996;
- District of Columbia: American Bar Assn. Annual Meeting, Washington, TIPS Aviation and Space Law, "Beyond the Horizon: What's Next in Aviation and Space Law Litigation," October 18, 2013;
- Florida: Association of Trial Lawyers of America 1992 Winter Convention, Boca Raton, "Cutting Edge Developments in Economic Testimony," January 15, 1992;
- Florida: Brain Injury Association 10th Anniversary Trial Lawyers Conference, Palm Beach, September 19, 1996;

- Florida: National Assn. of Consumer Advocates, 2003 NACA-FCRA Conference, Building on Our Success, Panel of Experts, "What the Experts Have Learned, A View From the Witness Box, " Orlando, March 9, 2003;
- Georgia: National Academy of Economic Arbitrators Annual Meeting, Differences in Economic Assumptions in Personal Injury Wage Calculations, Atlanta, December, 1989;
- Georgia: National Assn. of Forensic Economics Annual Meeting, Value of Life, Atlanta, December, 1989;
- Hawaii: American Bar Assn. Annual Meeting in Honolulu, HI, Speaker and Expert Witness at Mock Trial, Honolulu, August, 1989;
- Idaho: Inner Circle of Advocates Annual Meeting, Sun Valley, August, 1989; Illinois: University of Chicago 1982 Annual Management Conference on Venture Capital;
- Illinois: National Assn. of Consumer Advocates, 2009 NACA-FCRA Fair Credit Reporting Act Conference, "Credit Damages: How to Estimate Them," Chicago Hyatt Regency, May 9, 2009;
- Illinois: American Rehabilitation Economics Association Annual Conference, "Hedonic Damages: A Basic Approach," Chicago, June 13, 2009;
- Illinois: National Assn. of Consumer Advocates, 2010 NACA Autofraud Litigation Conference, Credit Damages: How to Estimate Them, "Chicago Hyatt Regency, May 16, 2010;
- Illinois: SEAK 19th Annual National Expert Witness Conference, "Handling the Toughest Questions: Depositions and Trial," Rosemont, June 25, 2010;
- Illinois: National Consumer Law Center 20th Annual Consumer Rights Litigation Conference, "Expert Witnesses at Trial Handling Experts in the Courtroom," Fairmont Chicago Millennium Park Hotel, November 5, 2011;
- Internet: Credit Bureau Strategy Consulting, Webinar Presentation, "The
 Economics of Credit Damage," September 14, 2009
- Louisiana: American Bar Assn., National Institute Transportation Megaconference, New Orleans, March 5, 1993;
- Louisiana: Defense Research Institute, Medical Malpractice Seminar, New Orleans, May 6, 1994;
- Louisiana: Association of Trial Lawyers of America 2001 Winter Convention, Litigation at Sunrise, "Measuring the Loss of Enjoyment of Life in Personal Injury Cases -- Hedonic Damages Over the Last Ten Years," New Orleans, February 12, 2001;
- Louisiana: National Assn. of Consumer Advocates, 2005 NACA-FCRA Conference, "Litigating Accuracy Issues with Furnishers of Credit Data," Speaker on Economic Damages, New Orleans, June 5, 2005;
- Michigan: Northwest #255 Air Disaster Steering Committee Mtg, Detroit, June, 1989;
- Nevada: American Rehabilitation Economics Association Conference, Mock Trial Presided by Nevada Supreme Court Justice William Maupin, Reno, May 15, 1999;
- Nevada: National Assn. of Consumer Advocates, 2006 NACA-FCRA Conference, "Experts on Damages," Washington, May 6, 2006;
- Nevada: National Assn. of Consumer Advocates, 2006 NACA-FCRA Conference, "Breakfast with the Stars," Washington, May 7, 2006;
- Nevada: Brain Injury Association of America; Mastering the Science and Trial Strategies, "Making Tangible the Intangible: Expanding the Traditional Measures," Las Vegas, April 4, 2008;
- Nevada: Internet Law Leadership Summit at Aria Resort & Casino, "Calculating Complex Financial Damages," Las Vegas, November 30, 2012;

- New York: Eastern Economic Association Annual Conference, "Estimating the Value of Family Household Management Services: Approaches and Markups," New York City, February 28, 2009;
- New York: Eastern Economic Association Annual Conference, "Credit Damage: Causes, Consequences and Valuation," New York City, February 28, 2009;
- Oregon: National Crime Victim Law Institute at Lewis & Clark Law School, Ninth Annual Crime Victim Law Conference, Due Process for Victims: Meaningful Rights in Every Case, Portland, June 11, 2010;
- Pennsylvania: Swiss Re American Annual Claims Conference, "Looking to the Third Millenium," Hershey, June 3, 1996;
- Texas: MADD Advanced Victim Assistance Institute Seminar, Dallas, November 12, 1994;
- Texas: National Norplant Litigation Conference 1995, Houston, June 22, 1995.

REGIONAL PRESENTATIONS:

- Hawaii: Western Trial Lawyers Assn. 1994 Annual Convention, "Making it Work-Trial Practice in the 90's," Maui, June 16, 1994;
- Illinois: GSA Seminar "Selling your Business", Chicago, October, 1987;
- Illinois: Society of Trial Lawyers, "How to Depose an Economist," Chicago, May 7, 2009;
- Louisiana: Southern Trial Lawyers Assn. Annual Meeting, New Orleans, 1988;
- Louisiana: Southern Trial Lawyers Assn. 1996 Mardi Gras Conference, ATLA
 - Traumatic Brain Injury Litigation Group, "Economic Implication of a Closed Head Injury," New Orleans, February 18, 1996;
- Michigan: Advocacy Institute, Continuing Legal Education, 46th Annual Seminar, "Wrongful Death of an Older Person," Ann Arbor, May 12, 1995;
- Michigan: Lorman Education Services, "Direct Examination of Experts in a Traumatic Brain Injury Case," Novi, August 21, 1997;
- Michigan: Lorman Education Services, "Direct Examination of Experts in a Traumatic Brain Injury Case," Livonia, August 26, 1998;
- New York: Eastern Finance Assn. Special Session on Pension Fund Asset Reversions, 1985;
- New York: American Reinsurance Company for Senior Claims Executives Annual Meeting, August, 1989;
- Ohio: Anderson Publishing Co., Proof of Economic Damages Seminar, Cincinnati, November 2, 1990.

STATEWIDE PRESENTATIONS:

- California: Arizona State Bar Fourth Annual "CLE By The Sea," San Diego, July 22-23, 1994:
- Connecticut Trial Lawyer Assn., "All About Experts," Hartford, November 21, 1992;
- Florida State Bar Assn., National Institute of Trial Advocacy (NITA), Advanced Trial Advocacy Seminar, Speaker and Expert Witness at Mock trial on Economic Damages, Gainesville, May 14, 1991;

- Georgia Brain Injury Association & Institute of Continuing Legal Education in Georgia, "Hedonic Damages: Proving Loss of Enjoyment of Life in Non-Fatal Injury Cases," Atlanta, March 29, 2002;
- Idaho Trial Lawyers Assn. Annual Meeting, Twin Falls, February 23, 1996; Illinois State Bar Assn. CLE Series, April, 1989;
- Illinois: Insurance Group of the Union League Club of Chicago, "Toward A More Rational Approach to Liability Judgments," Chicago, March 19, 1991;
- Indiana State Bar Assn. Annual Meeting, October, 1989;
- Indiana Trial Lawyers Assn. Annual Meeting, November 30, 1990;
- Indiana State Bar Assn. "Masters in Trial" Spring Meeting, South Bend, April 18,
 1997;
- Iowa Trial Lawyers Assn. Annual Meeting, Des Moines, November 5, 1993;
- Kentucky Academy of Trial Attorneys Damages Seminar, Louisville, August 18,1995;
- Louisiana Trial Lawyer Assn., Baton Rouge, "Winning with Experts" Seminar, November 10, 1989;
- Louisiana Trial Lawyer Assn., "Winning With the Masters" Seminar, New Orleans, November 21, 1995;
- Louisiana Trial Lawyer Assn., "Winning With the Masters" Seminar, New Orleans, December 10, 1997;
- Massachusetts Trial Lawyers Assn., "Learn From the Experts," Boston, October 9, 1992;
- Massachusetts Trial Lawyers Assn. Annual Mtg, Boston, October 29, 1993;
- Michigan Trial Lawyers Assn. Annual Mtg, Wrongful Death Damages, May, 1990;
- Michigan Head Injury Alliance Fifth Annual Seminar on Closed Head Injury, Detroit, March 24, 1994;
- Michigan Head Injury Alliance Sixth Annual Seminar on Closed Head Injury, Detroit, March 23, 1995;
- Michigan Head Injury Alliance Seventh Annual Seminar on Closed Head Injury, Detroit, March 28, 1996;
- Michigan Head Injury Alliance Eighth Annual Seminar on Closed Head Injury, Detroit, March 27, 1997;
- Michigan, Institute of Continuing Legal Education, "The Name of the Game is Damages--Plaintiff and Defense Strategies in Negligence and Employment Cases," Troy, July 20, 2000;
- Michigan Trial Lawyers Assn. Winter Seminar, "Hedonic Damages and Other Special Economic Issues," Gaylord, February 24, 2001;
- Michigan Trial Lawyers Assn. 13th Annual Seminar in the Snow, Litigation Strategies and Techniques, "Loss of Society and Household Companionship and Advisory Services," Bellaire, February 22, 2003;
- Mississippi Trial Lawyers Assn. Annual Convention, "Shooting Stars Seminar," Biloxi, May 19, 1995;
- Mississippi Trial Lawyers Assn. Annual Convention, "Taking Your Recovery to the Next Level: Hedonic Damages," Biloxi, May 10, 2001;
- Mississippi: Arkansas Trial Lawyer Assn. "Maximizing Damages in the Personal Injury Case," Tunica, MS, October 24, 2003;
- Missouri: Kansas Trial Lawyers Assn. Annual Meeting, Kansas City, December 8, 1990;
- Missouri State Bar Annual Meeting, Kansas City, September 19, 1996;
- Missouri State Bar CLE Seminar, Proving Damages in Catastrophic Injury Cases, "Hedonic Damages after September 11th and An Economist's View on Proving Economic Damages," Kansas City, April 19, 2002;

- Missouri State Bar CLE Seminar, Proving Damages in Catastrophic Injury Cases, "Hedonic Damages after September 11th and An Economist's View on Proving Economic Damages," St. Louis, May 9, 2002;
- Montana Trial Lawyer Association Fourth Annual Convention, "Proving The Intangible (Hedonic) Value of Human Life," Whitefish, July 23, 1993;
- Montana Trial Lawyer Association Seventh Annual Convention, Seminar of the Masters, Polson, August 1, 1996;
- Montana Trial Lawyer Association Spring Seminar, Scientific Evidence, "Making Tangible the Intangible: Loss of Enjoyment of Life, and Society & Companionship Damages," Billings, April 25, 2003;
- Nevada: Required Medical and Legal Education for the Traumatic Brain Injury Case, "9/11 Victim Compensation Fund Hedonic Damages: Implications for the State of Nevada," Las Vegas, October 25, 2002;
- New Hampshire Trial Lawyer Association, "Secrets & Strategies of Trial Law," Concord, October 8, 1993;
- New Mexico Trial Lawyers Association Annual Meeting, Economic Damages, Santa Fe, June 22, 1991;
- New Mexico Trial Lawyers Foundation Damages Seminar, Albuquerque, October 11, 1996;
- North Carolina, Brain Injury Assn. of NC, First Annual Trial Lawyers Conference, "The Use of Expert Testimony in Brain Injury Litigation," Charlotte, January 26, 1996;
- North Carolina, Brain Injury Assn. of NC, Second Annual Trial Lawyers Conference, "The Loss of Enjoyment of Life in Personal Injury - Hedonic Damages," Charlotte, January 24, 1997;
- North Dakota Trial Lawyers Assn, Annual Meeting Trial Practice Seminar, Fargo, May 4, 1995;
- Ohio Assn. of Trial Lawyers Annual Meeting, Speaker and Expert Witness at Mock Trial on Wrongful Death Damages, Toledo, April, 1990;
- Ohio Head Injury Association, "Representing the Survivor of Mild Head Injury," Annual Seminar, Columbus, June 3, 1994;
- Pennsylvania: Philadelphia Trial Lawyers Association CLE Lecture Series, March 17, 1993;
- South Dakota Trial Lawyers Assn. Spring Seminar, April, 1989;
- Texas Trial Lawyers Assn., Medical Malpractice Seminar, Wrongful Death Damages, Houston, May, 1990;
- Washington State Trial Lawyers Annual Meeting & Convention, Stevenson, July 11, 1998;
- Wisconsin Assn. of Trial Lawyers Annual Mtg, Wrongful Death Damages, Door County, July, 1990;
- Wisconsin Brain Injury 2nd Annual Seminar, "Identifying and Understanding Traumatic Brain Injury," Green Lake, May 31, 1997.

LOCAL PRESENTATIONS:

Alaska: Alaska Trial Lawyers Assn., Anchorage, August, 1989; California: "Value of Life: Dismal Science From the Courtroom, "Economics Department Workshop Colloquium, Pomona College, Claremont, April 17, 2006;

Illinois: Chicago North Suburban Bar Assn. May, 1988;

Illinois: Chicago Advocates Society, June, 1988;

Illinois: Northwest Chicago Suburban Bar Assn., January, 1989; Illinois: Chicago Public Radio, WBEZ, February, 1989; Illinois: DuPage County, Bar Assn., Chicago, May, 1989; Illinois: Sangamon County Trial Lawyers Assn., Springfield, May, 1989; Illinois: McHenry County Bar Assn., Chicago, May, 1989; Illinois: Chicago Bar Assn. Wrongful Death Seminar, Wrongful Death Damages, February, 1990; Illinois: Chicago Bar Assn. Torts Seminar, Defense Perspectives on Economic Damages, January 21, 1991; Illinois: Chicago Bar Assn., Wrongful Death Seminar, February 11, 1993; Illinois: Chicago Bar Assn. Effective Direct and Cross-Examination of Expert Witnesses - A Demonstration, January 9, 1995; Illinois: Interstate National Corporation, "Cutting Edge Developments on Economic Damages - Defense Perspectives", Chicago, August 2, 1995; Illinois: Interstate National Corporation, "Cutting Edge Developments on Economic Damages - Defense Perspectives", Chicago, September 2, 1997; Illinois: Cassiday Schade & Gloor, "Catastrophic Damages...They're Back! -Limiting Damages After the Invalidation of Tort Reform, " Chicago, November 18, 1998; Illinois: Law Bulletin Publishing Company, Legal Career Day, Economic Outlook for Lawyer Employment, Chicago, April 13, 2004; Illinois: Fox News Contributor WFLD TV, October 10 and October 15, 2008; February 25, March 24, April 10, April 20, June 17, August 3, August 26 and October 19, 2009; Michigan: American Radio Network, WFOX, Detroit, January, 1989; Michigan: Oakland County Bar Association Negligence Committee, Bloomfield Hills, November 5, 1996; Ohio: Hamilton County, Bar Assn. Seminar on Economic Damages, Cincinnati, January 31, 1991.

TELEVISION/VIDEO PRESENTATIONS

American Bar Association Tort and Insurance Practice Section Annual Meeting, "Hedonic Damages," San Francisco, CA, August 10, 1992;

American Law Institute-American Bar Association, ALI-ABA Tape,

"Hedonic Damages: Litigating the Loss of Enjoyment of Life," The Lawyers'

Video Magazine, Vol. III Issue 20, Philadelphia, PA, December, 1991;

CNN: Larry King Live, May 22, 1989.

PERSONAL BACKGROUND:

Born November 16, 1946, Rhinelander, Wisconsin; Graduated Nicolet High School 1964, Milwaukee, Wisconsin; Honorable Discharge U.S. Army, 1975; Member of Chicago Board Options Exchange, 1975-1978.